

DOCKETED

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[Energy Code Amendments – State REDLINE Version.]

ORDINANCE NO. 2022-13

AN ORDINANCE OF THE CITY COUNCIL OF ENCINITAS, ADOPTING AMENDMENTS TO CHAPTER 23.12 (UNIFORM CODES FOR CONSTRUCTION) OF TITLE 23 (BUILDING AND CONSTRUCTION) OF THE ENCINITAS MUNICIPAL CODE TO MAKE CERTAIN AMENDMENTS, ADDITIONS, AND DELETIONS RELATED TO ENERGY EFFICIENCY AND SOLAR ENERGY

CASE NUMBER: PLCY-005615-2022; CITYWIDE

SECTION ONE. The City Council of the City of Encinitas hereby finds and declares as follows:

WHEREAS, the City of Encinitas desires to amend Section 23.12.080 Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the City of Encinitas Municipal Code to implement goals and objectives set forth in the Climate Action Plan for reducing greenhouse gas (GHG) emissions, conserving water and energy, encouraging green buildings, protecting the natural environment, and protecting the health of residents and visitors;

WHEREAS, the California Global Warming Solutions Act of 2006, known as AB 32, established a statewide goal of reducing greenhouse gas emission to 1990 levels by 2020 and to a level 80 percent below 1990 levels by 2050, and directs the California Air Resources Board to develop a strategy to achieve such reductions;

WHEREAS, the State of California Climate Strategy identifies key strategies for addressing climate change that includes increasing renewable energy usage, doubling energy efficiency savings in existing buildings, making heating fuels cleaner, and reducing emissions from transportation;

WHEREAS, the City Council of the City of Encinitas adopted CEQA-qualified Climate Action Plan on January 17, 2018, aligning local climate action policies with the State of California Climate Strategy including the adoption strategies and goals to procure grid available electricity from 100 percent renewable energy sources, increase energy efficiency in residential and non-residential buildings, and promote the installation of local renewable energy sources at homes and businesses;

WHEREAS, the City of Encinitas Climate Action Plan found that buildings are the second largest contributor to GHG emissions, accounting for 39 percent of its total emissions in 2012;

WHEREAS, the United Nations Intergovernmental Panel on Climate Change (IPCC) has warned that failure to address the causes of global climate change within the next few years will result in sea level rise, increased frequency of wildland fires, and reduced freshwater resources, which will significantly increase the cost of providing local governmental services and protecting public infrastructure;

WHEREAS, the City Council of the City of Encinitas adopted Resolution 2020-90 Declaring a Climate Emergency on December 16, 2020;

WHEREAS, the 2019 California Building Standards Code adopted by the California Building Standards Commission has set minimum Green Building Standards and, within the code,

expressly stated that the standards are viewed as “minimal” and that local government entities retain discretion, pursuant to Health and Safety Code Section 17958 to exceed the standards established by the code based on express findings that such changes or modifications are reasonably necessary because of local climatic, topographical, or geological conditions pursuant to Health and Safety Code Section 17985.5, 17958.7, and 18941.5;

WHEREAS, California Green Building Standard Code Section 101.7.1 provides that local climatic, geological, or topographical conditions include environmental conditions established by a city, county, or city and county;

WHEREAS, the local amendments and changes to the California Building Standards Codes are reasonably necessary because of the following climatic, geologic, and topographical conditions:

1. The City has over six (6) miles of beaches, several creeks, and other low-lying areas prone to flooding. The City is at risk to coastal storms, erosion, and flooding. There is broad scientific consensus that the earth will continue to warm, and sea levels will rise impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
2. The City has experienced increases in annual temperature. Annual temperatures have increased more than 1-degree Fahrenheit in many parts of the state and have exceeded increases of 2-degree Fahrenheit in areas that include the San Diego region. Temperature increases are expected to continue into the future.
3. The City is situated in hilly, coastal and inland terrain. Approximately 50 percent of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation consists of highly combustible grasses, dense brush, and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana wind conditions produces extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region’s most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City’s General Plan and Climate Action Plan. Energy Efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
6. Amendments to the California Energy Code are reasonably necessary to promote energy efficiency and conservation in the City, reduce GHG emissions, promote green

development patterns, and maintain a long-term balance between environmental, social, and economic impacts that protect public health and welfare.

WHEREAS, Public Resources Code Section 25402.1(h)(2) and Section 10-106 of the Building Energy Efficiency Standards establish a process by which local governments may adopt more stringent energy efficiency standards provided that the more stringent standards are cost effective and the California Energy Commission finds that the standards will require buildings to be designed to consume no more energy than permitted by the California Energy Code;

WHEREAS, the following studies¹ demonstrate that the local amendments are cost-effective and do not result in buildings consuming more energy than is permitted by the California Energy Code:

1. 2019 Cost-effectiveness Study: Single Family Residential Building Upgrades (August 27, 2021);
2. 2019 Cost-Effectiveness Study: Existing Multifamily Residential Building Upgrades (March 7, 2022);
3. Cost-effectiveness Study Memorandum: Existing Single Family and Low-rise Multifamily Retrofits (September 2022),
4. 2019 Reach Code Cost-effectiveness Analysis: Nonresidential Alterations (January 27, 2022),
5. 2022 Cost-effectiveness Study: Single Family New Construction (September 2022); and
6. 2022 Nonresidential New Construction Reach Code Cost-effectiveness Study (September 2022);

WHEREAS, the City Council finds in its independent judgment that the proposed amendment to the Encinitas Municipal Code to adopt State uniform codes is exempt from environmental review as per Section 15378(b)(5) of the CEQA Guidelines since the activity in question is not considered a "project" as defined therein. The action being considered by the City Council is an administrative activity of government that will not result in the direct or indirect physical change in the environment. This action entails adoption of State mandated Building Codes that are enforceable upon the City. Minor amendments will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduced environmental effects. Furthermore, the amendments were previously evaluated in the Final Negative Declaration (ND) for the Climate Action Plan (Case No. 17-224), dated December 5, 2017, and Addendum to the ND (Case No. ENV-004106-2020), dated Oct 20, 2020. The ND and the Addendum evaluated the potential environmental effects of the implementation of the Climate Action Plan including the adoption and enforcement of energy efficiency and renewable energy ordinances. This project is within the scope of the Final Negative Declaration and the Addendum and no further California Environmental Quality Act (CEQA) compliance is required. The City Council therefore finds that there is no possibility that the minor local amendments may have a significant effect on the environment; therefore pursuant to Section 15061(b)(3) of the CEQA Guidelines the activity is exempt from the provisions of CEQA; and

WHEREAS, the City Council of the City of Encinitas now seeks to amend Section 23.12.080 of Chapter 23.12 to reflect its Climate Action Plan.

¹ All studies can be found on the Local Energy Codes & Standards website here: <https://localenergycodes.com/>

NOW, THEREFORE, the City Council of the City of Encinitas, California, hereby ordains as follows:

SECTION TWO. Ordinance 2021-13 amending 23.12.080 of Chapter 23.12 of the Encinitas Municipal Code is hereby repealed in its entirety. Section 23.12.080 of Chapter 23.12 of the Encinitas Municipal Code is hereby amended to add, modify, or remove the following sections as specified herein:

- A. Section 100.1 DEFINITIONS, is hereby amended to modify the following definition to the 2022 California Energy Code to read:

NEWLY CONSTRUCTED BUILDING (or NEW CONSTRUCTION) shall have the meaning defined in Title 24, Part 2, Chapter 2, Section 202, as amended.

- B. Section 120.11 of Section 23.12.080 is hereby amended and added to the California Energy Code as follows:

Section 120.11 - NONRESIDENTIAL PHOTOVOLTAIC SYSTEM REQUIRED

Additions to existing nonresidential and hotel/motel buildings where the total roof area is increased by at least 1,000 square feet shall comply with the requirements of Section 120.11(a) or (b). Alterations to such buildings with a permit valuation of at least \$1,000,000 that affects at least 75 percent of the gross floor area shall also comply with the requirements of Section 120.11 (a) or (b). These requirements shall apply to Mixed Occupancy buildings as specified in Section 110.0(f).

The required installation of a photovoltaic (PV) system shall be sized according to one of the following methods:

(a) Based on Gross floor area.

1. Buildings with greater than or equal to 10,000 square feet of gross floor area shall install a minimum PV system sized at 15 kilowatts direct current (kWdc) per 10,000 square feet of gross floor area.

Note to Section 120.11(a)1: PV system size = 15 kWdc X (Gross Floor Area/ 10,000 sq. ft.) where the building size factor shall be rounded to the nearest tenth and the resulting product shall be rounded to the nearest whole number. For example, an applicant with a 126,800 square foot building shall install a minimum 191 kilowatt (kWdc) PV system.

2. Buildings under 10,000 square feet of gross floor area shall install a minimum 5 kilowatt (kWdc) PV system.

Note to Section 120.11(a): Applicants are encouraged to right-size the PV system based on the building's electrical demand to improve the system's cost effectiveness. Applications should also ensure that the PV system meets electrical corporation net energy metering requirements, if applicable.

Note to Section 120.11(a): Where appropriate and where approved by Development Services Director or designee, a PV system based on gross floor area may be based on the scope of the application where the system size reflects only the gross square footage controlled by the applicant, such as a tenant improvement that only affects the tenant's portion of a building's total gross floor area or a general renovation of a nonresidential building by a property owner or manager that only affects common areas. Applicant specific gross floor area PV systems shall be the minimum requirement unless an applicant can demonstrate to the Development Services Director or designee that serving applicant specific load is infeasible per Exception 1 to Section 120.11.

(b) Based on New Construction Energy Code

Comply with CA Title 24, Part 6, Energy Code Section 140.10(a) which otherwise applies to Newly Constructed Buildings.

Note to Section 120.11(a) and (b): In determining whether additions to existing buildings increase the total roof area by at least 1,000 square feet, only roof area for new Enclosed Space, as defined in 23.12.030, Section 202, shall be included.

Exception 1 to Section 120.11: The Development Services Director or designee may waive or reduce, by the maximum extent necessary, the provision of this Section if the Development Services Director or designee determines there are sufficient practical challenges to make satisfaction of the requirements infeasible. Practical challenges may be the result of the building site location, structural load limitations, limited rooftop availability, or shading from nearby structures, topography or vegetation. The applicant is responsible for demonstrating requirement infeasibility when applying for an exception.

Exception 2 to Section 120.11: The Development Services Director or designee may waive or reduce, by the maximum extent necessary, the provisions of this Section if the Development Services Director or designee determines the building has satisfied the purpose and intent of this provision through the use of alternate on-site renewable generation systems, such as wind energy systems.

Exception 3 to Section 120.11: Greenhouse structures used for commercial cultivation, educational purposes, or the conservancy of plants or animals are exempted from the requirements of Section 120.11. The Development Services Director or designee may exempt other greenhouse structure uses on a case- by- case basis.

Exception 4 to Section 120.11: If offered by local load serving entity (e.g. local utility provider), alterations having a building permit of at least \$1,000,000 and affecting at least 75 percent of the existing floor area, or additions that increase roof size by at least 1,000 square feet, may instead comply with Section 120.11 by submitting proof to the Development Services Director or designee that each electrical meter related to the new construction, alteration, or addition is served by a load serving entity's electric tariff, contract, or offered product that provides the greatest available percentage of electrical power from renewable energy sources.

To comply with this exception, the applicant must prove that the load serving entity's electric tariff, contract, or offered product is equivalent to the greatest available percentage of electrical power from renewable energy sources for any customer in the City of Encinitas. Proof of enrollment shall be maintained and documented through utility billings and shall be provided upon request to the Development Services Director or designee. If required, applicant shall consent to disclosure of tariff documentation to the Development Services Director or designee for verification as authorized under California Public Utilities Code § 8380 (b). Applicant consent and disclosure shall be limited to Development Services Director or designee accessing tariff information for verification purposes only.

Exception 5 to Section 120.11: An applicant may install a ground-mounted solar PV system that meets the requirements of Section 120.11 as a voluntary alternative to installing rooftop solar PV. The ground-mounted solar photovoltaic system shall comply with all existing health and safety requirements and limitations in the City.

Exception 6 to Section 120.11: Permit valuation shall exclude valuations for aesthetic exterior alterations in determining the \$1,000,000 permit valuation for alterations to existing buildings.

Note to Exception 6 in Section 120.11: Exclusion of aesthetic exterior alterations is intended to remove façade alterations and other exterior alterations that do not affect internal floor space or are not otherwise required to comply with health and safety requirements.

C. Section 160.10 is added to the California Energy Code as follows:

Section 160.10 – HIGH-RISE RESIDENTIAL PHOTOVOLTAIC SYSTEM REQUIRED

Additions to existing high-rise residential buildings, where the total roof area is increased by at least 1,000 square feet, shall comply with the requirements of Section 160.10(a) or (b). Alterations to such buildings with a permit valuation of at least \$1,000,000 that affects at least 75 percent of the gross floor area shall also comply with the requirements of Section 160.10(a) or (b). These requirements shall also apply to Mixed Occupancy buildings, as specified in Section 110.0(f).

The required installation of a photovoltaic (PV) system shall be sized according to one of the following methods:

(a) Based on Gross floor area.

1. Buildings with greater than or equal to 10,000 square feet of gross floor area shall install a minimum PV system sized at 15 kilowatts direct current (kWdc) per 10,000 square feet of gross floor area.

Note to Section 160.10(a)1: PV system size = 15 kWdc X (Gross Floor Area/ 10,000 sq. ft.) where the building size factor shall be rounded to the nearest tenth and the resulting product shall be rounded to the nearest whole number. For example, an applicant with a 126,800 square foot building shall install a minimum 191 kilowatt (kWdc) PV system.

2. Buildings under 10,000 square feet of gross floor area shall install a minimum 5 kilowatt (kWdc) PV system.

Note to Section 160.10(a): Applicants are encouraged to right-size the PV system based on the building's electrical demand to improve the system's cost effectiveness. Applications should also ensure that the PV system meets electrical corporation net energy metering requirements, if applicable.

Note to Section 160.10(a): Where appropriate and where approved by Development Services Director or designee, a PV system based on gross floor area may be based on the scope of the application where the system size reflects only the gross square footage controlled by the applicant, such as a tenant improvement that only affects the tenant's portion of a building's total gross floor area or a general renovation of a nonresidential building by a property owner or manager that only affects common areas. Applicant specific gross floor area PV systems shall be the minimum requirement unless an applicant can demonstrate to the Development Services Director or designee that serving applicant specific load is infeasible per Exception 1 to Section 160.10.

(b) Based on New Construction Energy Code

Comply with Section 170.2(g) which otherwise applies to Newly Constructed Buildings.

Note to Section 160.10(a) and (b): In determining whether additions to existing buildings increased the total roof area by at least 1,000 square feet, only roof area for new Enclosed Space, defined as space that is substantially surrounded by solid surfaces, including walls, ceilings or roofs, doors, fenestration areas, and floors or ground, is applicable. For sizing of a system, the determination of total roof area shall also be consistent with total roof area under Title 24, Part 6, Section 110.10 (b)1.B.

Exception 1 to Section 160.10: The Development Services Director or designee may waive or reduce, by the maximum extent necessary, the provision of this Section if the Development Services Director or designee determines there are sufficient practical challenges to make satisfaction of the requirements infeasible. Practical challenges may be the result of the building site location, structural load limitations, limited rooftop availability, or shading from nearby structures, topography or vegetation. The applicant is responsible for demonstrating requirement infeasibility when applying for an exception.

Exception 2 to Section 160.10: The Development Services Director or designee may waive or reduce, by the maximum extent necessary, the provisions of this Section if the Development Services Director or designee determines the building has satisfied the purpose and intent of this provision through the use of alternate on-site renewable generation systems, such as wind energy systems.

Exception 3 to Section 160.10: Greenhouse structures used for commercial cultivation, educational purposes, or the conservancy of plants or animals are exempted from the requirements of Section 160.10. The Development Services Director or designee may exempt other greenhouse structure uses on a case- by-case basis.

Exception 4 to Section 160.10: If offered by local load serving entity (e.g. local utility provider, alterations having a building permit of at least \$1,000,000 and affecting at least 75 percent of the existing floor area, or additions that increase roof size by at least 1,000 square feet, may instead comply with to Section 160.10 by submitting proof to the Development Services Director or designee that each electrical meter related to the new construction, alteration, or addition is served by a load serving entity's electric tariff, contract, or offered product that provides the greatest available percentage of electrical power from renewable energy sources. To comply with this exception, the applicant must prove that the load serving entity's electric tariff, contract, or offered product is equivalent to the greatest available percentage of electrical power from renewable energy sources for any customer in the City of Encinitas. Proof of enrollment shall be maintained and documented through utility billings and shall be provided upon request to the Development Services Director or designee. If required, applicant shall consent to disclosure of tariff documentation to the Development Services Director or designee for verification as authorized under California Public Utilities Code § 8380 (b). Applicant consent and disclosure shall be limited to Development Services Director or designee accessing tariff information for verification purposes only.

Exception 5 to Section 160.10: An applicant may install a ground-mounted solar PV system that meets the requirements of Section 160.10 as a voluntary alternative to installing rooftop solar PV. The ground-mounted solar photovoltaic system shall comply with all existing health and safety requirements and limitations in the City.

Exception 6 to Section 160.10: Permit valuation shall exclude valuations for aesthetic exterior alterations in determining the \$1,000,000 permit valuation for alterations to existing buildings.

Note to Exception 6 to Section 160.10: Exclusion of aesthetic exterior alterations is intended to remove facade alterations and other exterior alterations that do not affect internal floor space or are not otherwise required to comply with health and safety requirements.

D. Section 150.2 of the California Energy Code is amended to add Section (d) as follows:

(d) Single Family Additions or Alterations

The following requirements shall apply to the entire dwelling unit, not just the addition or altered portion. All additions and alterations of single family residential buildings with a building permit valuation of \$50,000 or higher shall include any one of the measures identified as Available in Table 150.2-E, Single-Family Requirements, where vintage shall refer to the year in which the building was originally permitted for construction. The measures shall be installed to the specifications in Table 150.2-F, Single-Family Measure Specifications. Existing measures that meet the specifications in Table 150.2-F may be used to satisfy the requirements.

Note: To the extent the provisions of Section 150.2(d) conflict with other provisions of the California Energy Code, then the most energy conserving provisions shall supersede and control.

Exception to Section 150.2(d): The requirement for inclusion of energy efficiency measures does not apply to residential buildings that receive a rating of seven (7) or higher on the U.S. Department of Energy's Home Energy Score rating system based upon an assessment by a Home Energy Score Certified Assessor, to the satisfaction of the Development Services Director or designee.

<u>Table 150.2-E: Single Family Requirements</u>			
	<u>Building Vintage</u>		
<u>Measures</u>	<u>Pre-1978</u>	<u>1978-1991</u>	<u>Post-1991</u>
<u>LED Lamps, Vacancy Sensors and Exterior Photocells</u>	<u>Available *</u>	<u>Available *</u>	<u>Available *</u>
<u>Water Heating Package</u>	<u>Available *</u>	<u>Available *</u>	<u>Available *</u>
<u>Cool Roof</u>	<u>Available *</u>	<u>Available *</u>	<u>Available</u>
<u>R-38 Attic Insulation and Air Sealing</u>	<u>Available *</u>	<u>Available</u>	<u>Available *</u>
<u>Duct Sealing</u>	<u>Available *</u>	<u>Available *</u>	<u>Available</u>
<u>New Ducts + Duct Sealing</u>	<u>Available *</u>	<u>Available</u>	<u>Available</u>
<u>Windows</u>	<u>Available</u>	<u>Available</u>	<u>Not applicable</u>
<u>R-13 Wall Insulation</u>	<u>Available</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>Heat Pump Water Heater (HPWH)</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>Heat Pump HVAC</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>Heat Pump Clothes Dryer</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>Induction Cooktop</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>PV + Electric Ready Pre-Wire</u>	<u>Available *</u>	<u>Available *</u>	<u>Available *</u>

* Measures that have been shown to be cost effective in this region.

<u>Table 150.2-F: Single Family Measure Specifications</u>
<u>Measure Specifications</u>
<u>LED lamps, Vacancy Sensors and Exterior Photocells: Replace all interior and exterior screw-in incandescent, halogen, and compact fluorescent lamps with LED lamps. Install manual-on automatic-off vacancy sensors that meet Title 24 Section 110.9(b)4 in all bathrooms, bedrooms, offices, laundry rooms, utility rooms, and garages. Spaces which already include vacancy sensors, motion sensors, or dimmers do not need to install new Title 24 Section 110.9(b)4 sensors. Install photocell controls on all exterior lighting luminaires.</u>
<u>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 ¾ 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.</u>
<u>Cool Roof: Install a cool roof. For steep-sloped roofs (ratio of rise to run greater than 2:12) install a roofing product rated by the Cool Roof Rating Council to have an aged solar</u>

reflectance equal to or greater than 0.25, and a thermal emittance equal to or greater than 0.75. For low-sloped roofs, install a roofing product meeting the requirements of Section 150.2(b)1liia, and insulate the roof in accordance with Section 150.2(b)1liib. Only areas of roof that are to be re-roofed are subject to the cool roof upgrade. All exceptions as stated in 2022 Title 24 Section 150.2(b)1li for steep slope roofs and 150.2(b)1lii for low slope roofs are allowed.

R-38 Attic Insulation and Air Sealing.

Attic Insulation: Attic insulation shall be installed to achieve a weighted assembly U-factor of 0.026 or insulation installed at the ceiling level shall have a thermal resistance of R-38 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. Existing R-19 insulation satisfies this requirement.

Air Sealing: Seal all accessible cracks, holes, and gaps in the building 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. Testing shall be conducted by a certified HERS Rater no more than three years prior to the permit application date 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 post 1991 vintage buildings. 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.

Duct Sealing: Air seal all space conditioning ductwork to meet the requirements of the 2022 Title 24 Section 150.2(b)1E. The duct system must be tested by a HERS Rater no more than three years prior to the permit application date to verify the duct sealing and confirm that the requirements have been met.

New Ducts + Duct Sealing: Replace existing space conditioning ductwork with new R-8 ducts that meet the requirements of 2022 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 Covered Single Family Project permit application date.

Windows: Replace all existing windows with high performance windows with an area-weighted average U-factor no greater than 0.32.

R-13 Wall Insulation: Install wall insulation in all exterior walls to achieve a weighted U-factor of 0.102 or install wall insulation in all exterior wall cavities that shall result in an installed thermal resistance of R-13 or greater for the insulation alone.

Heat Pump Water Heater (HPWH): Replace existing electric resistance or natural gas storage water heater with a heat pump water heater.

HVAC Heat Pump: Replace existing gas space heating system or all existing electric resistance heating systems with an electric heat pump system.

Heat Pump Clothes Dryer: Replace existing electric resistance clothes dryer with heat pump dryer with no resistance element and cap gas line.

Induction Cooktop: Replace existing gas and electric resistance stove top with inductive stove top and cap the gas line.

PV+ Electric Ready Pre-Wire: Install a solar PV system that meets the requirements of 2022 Title 24 Reference Appendix JA11. The system shall be sized such that the estimated annual kWh production shall not exceed the projected annual kWh demand. Upgrade the panelboard serving the individual dwelling to provide circuit breaker spaces for a heat pump water heater, heat pump space heater, electric cooktop and electric clothes dryer with the capacities specified in California Energy Code Section 150.0 (n), (t), (u) and (v); or, provide electrical load calculations and appliance specifications for serving all of these end-uses with a minimum 100-amp panel. Install any two circuits for electric appliances from the list below:

1. Heat Pump Water Heater Ready, as specified in Section 150.0(n)1
2. Heat Pump Space Heater Ready, as specified in Section 150.0(t)
3. Electric Clothes Dryer Ready, as specified in Section 150.0(v)
4. Electric Cooktop Ready, as specified in Section 150.0(u)
5. Energy Storage Systems (ESS) Ready, as specified in Section 150.0(s)
6. EV Charger Ready. Install a dedicated 208/240-volt branch circuit as specified in the California Green Building Code, Title 24, Part 11, Section A4.106.8.1, which otherwise applies to new construction

E. Section 180 of the California Energy Code is amended to add Section 180.5 as follows:

Section 180.5 - MULTIFAMILY ADDITIONS OR ALTERATIONS

The following requirements shall apply to the entire dwelling unit, not just the addition or altered portion. All additions and alterations of individual residential dwelling units (within the multifamily building), with a building permit valuation of \$50,000 or higher shall include any one of the measures identified as Available in Table 180.5-A, Multifamily Requirements, where vintage shall refer to the year in which the building was originally permitted for construction. The measures shall be installed to the specifications in Table 180.5-B, Multifamily Measure Specifications. Existing measures that meet the specifications in Table 180.5-B may be used to satisfy the requirements.

Note: To the extent the provisions of Section 180.5 conflict with other provisions of the California Energy Code, then the most energy conserving provisions shall supersede and control.

<u>Measures</u>	<u>Building Vintage</u>		
	<u>Pre-1978</u>	<u>1978-1991</u>	<u>Post-1991</u>
<u>LED Lamps, Vacancy Sensors and Exterior Photocells</u>	<u>Available *</u>	<u>Available *</u>	<u>Available *</u>
<u>Water Heating Package</u>	<u>Available *</u>	<u>Available *</u>	<u>Available *</u>
<u>Cool Roof</u>	<u>Available *</u>	<u>Available *</u>	<u>Available</u>

<u>R-38 Attic Insulation and Air Sealing</u>	<u>Available *</u>	<u>Available</u>	<u>Available</u>
<u>Duct Sealing</u>	<u>Available *</u>	<u>Available *</u>	<u>Not applicable</u>
<u>New Ducts + Duct Sealing</u>	<u>Available *</u>	<u>Available</u>	<u>Available</u>
<u>Windows</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>R-13 Wall Insulation</u>	<u>Available</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>Floor Insulation</u>	<u>Available</u>	<u>Not applicable</u>	<u>Not applicable</u>
<u>Heat Pump Water Heater (HPWH)</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>Heat Pump HVAC</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>Heat Pump Clothes Dryer</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>Induction Cooktop</u>	<u>Available</u>	<u>Available</u>	<u>Available</u>
<u>PV + Electric Ready Pre-Wire</u>	<u>Available *</u>	<u>Available *</u>	<u>Available *</u>

* Measures that have been shown to be cost effective in this region.

<p><u>Table 180.5-B: Multifamily Measure Specifications</u></p> <p><u>LED lamps, Vacancy Sensors and Exterior Photocells:</u> Replace all interior and exterior screw-in incandescent, halogen, and compact fluorescent lamps with LED lamps. Install manual-on automatic-off vacancy sensors that meet Title 24 Section 110.9(b)4 in all bathrooms, bedrooms, offices, laundry rooms, utility rooms, and garages. Spaces which already include vacancy sensors, motion sensors, or dimmers do not need to install new Title 24 Section 110.9(b)4 sensors. Install photocell controls on all exterior lighting luminaires.</p> <p><u>Water Heating Package:</u> 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 ¾ 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.</p> <p><u>Cool Roof:</u> Install a cool roof. For steep-sloped roofs (ratio of rise to run greater than 2:12) install a roofing product rated by the Cool Roof Rating Council to have an aged solar reflectance equal to or greater than 0.25, and a thermal emittance equal to or greater than 0.75. Low slope roofs (ratio of rise to run of 2:12 or less) shall meet the requirements of Section 180.2(b)1li of 2019 Title 24, Part 6. All exceptions as stated in 2022 Title 24 Section 180.2(b)1li for low slope roofs and 180.2(b)1lii for steep slope roofs are allowed.</p> <p><u>R-38 Attic Insulation and Air Sealing</u></p> <p><u>Attic Insulation:</u> Attic insulation shall be installed to achieve a weighted assembly U-factor of 0.026 or insulation installed at the ceiling level shall have a thermal resistance of R-38 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. Existing R-19 insulation satisfies this requirement.</p>
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Air Sealing: Seal all accessible cracks, holes, and gaps in the building 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. Testing shall be conducted by a certified HERS Rater no more than three years prior to the permit application date 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 post 1991 vintage buildings. 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.

Duct Sealing: Air seal all space conditioning ductwork to meet the requirements of 2022 Title 24 Section 180.2(b)2Aiii. The duct system must be tested by a HERS Rater no more than three years prior to the Low-Rise Multifamily Covered Project permit application date to verify the duct sealing and confirm that the requirements have been met.

New Ducts + Duct Sealing: Replace existing space conditioning ductwork with new R-8 ducts that meet the requirements of 2022 Title 24, Part 6 Section 160.3(b)5.K, with the exception that the maximum duct leakage be reduced from the current code requirement of 12 percent to five percent. To qualify, a preexisting measure must have been installed no more than three years before the Low-Rise Multifamily Covered Project permit application date.

Windows: Replace all existing windows with high performance windows with an area-weighted average U-factor no greater than 0.32.

R-13 Wall Insulation: Install wall insulation in all exterior walls to achieve a weighted U-factor of 0.102 or install wall insulation in all exterior wall cavities that shall result in an installed thermal resistance of R-13 or greater for the insulation alone.

Floor Insulation: Install floor insulation in the floor cavity of all exterior raised floors to achieve a weighted U-factor of 0.037 or an installed thermal resistance of R-19 or greater for the insulation alone.

PV+ Electric Ready Pre-Wire: Install a solar PV system that meets the prescriptive requirements in Section 170.2(f). The system shall be sized such that the estimated annual kWh production shall not exceed the projected annual kWh demand. Upgrade the panelboard serving the individual dwelling to provide circuit breaker spaces for a heat pump water heater, heat pump space heater, electric cooktop and electric clothes dryer with the capacities specified in California Energy Code Section 150.0 (n), (t), (u) and (v); or, provide electrical load calculations and appliance specifications for serving all of these end-uses with a minimum 100-amp panel. Install any two circuits for electric appliances from the list below:

1. Heat Pump Water Heater Ready, as otherwise specified for Single Family buildings in Section 150.0(n)1
2. Heat Pump Space Heater Ready, as specified in Section 160.9(a)
3. Electric Clothes Dryer Ready, as specified in Section 160.9(b)
4. Electric Cooktop Ready, as specified in Section 160.9(b)
5. Energy Storage Systems (ESS) Ready, as otherwise specified for Single Family buildings in Section 150.0(s)

6. EV Charger Ready. Install a dedicated 208/240-volt branch circuit as specified in the California Green Building Code, Title 24, Part 11, Section A4.106.8.1, which otherwise applies to single family new construction

F. **Applicability:** These requirements apply to all building permit applications filed on or after January 1, 2023 or the effective date, whichever is later. On or after August 2, 2022 and until December 31, 2022, or the effective date of this ordinance, whichever is later, the requirements adopted by Ordinance No. 2021-13 shall apply.

SECTION THREE. SEVERABILITY.

If any section, subsection, sentence, clause, phrase or word of this Ordinance is for any reason held to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed and adopted this Ordinance, and each and all provisions hereof, irrespective of the fact that one or more provisions may be declared invalid.

SECTION FOUR. PUBLIC NOTICE AND EFFECTIVE DATE.

The City Clerk is directed to prepare and have published a summary of the Ordinance no less than five days prior to consideration of its adoption, and again within 15 days following adoption, indicating the votes cast.

This ordinance shall take effect and be in force on January 1, 2023, or the 30th day after adoption and following approval of the California Energy Commission and filing with the California Building Standards Commission, whichever is later. The City Clerk of City of Encinitas is hereby authorized to use summary publication procedures pursuant to Government Code Section 26933 utilizing the Coast News, a newspaper of general circulation published in the City of Encinitas.

SECTION FIVE: INTRODUCTION AND ADOPTION.

This Ordinance was introduced at a regular meeting of the City Council held on _____.

PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council held on the ____ day of _____.

Catherine S. Blakespear, Mayor

ATTEST:

Kathy Hollywood, City Clerk

APPROVED AS TO FORM

Tarquin Preziosi, City Attorney

CERTIFICATION: I, Kathy Hollywood, City Clerk of the City of Encinitas, California, do hereby certify under penalty of perjury that the foregoing ordinance was duly and regularly introduced at a meeting of the City Council on the ___ day of _____, 2022 and that thereafter the said ordinance was duly and regularly adopted at a meeting of the City Council on the ____ of _____, 2022 by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Encinitas, California, this _____ day of _____, 2022.

Kathy Hollywood, City Clerk