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Santa Monica, California

City Council Meeting: September 10, 2024

ORDINANCE NUMBER____(CCS)

(City Council Series)

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SANTA MONICA

AMENDING ARTICLE 8 OF THE SANTA MONICA MUNICIPAL CODE BY

REPEALING CHAPTER 8.38 ENTITLED "ZERO EMISSION BUILDING CODE" AND

ADOPTING LOCAL AMENDMENTS TO THE CALIFORNIA ENERGY CODE TITLE

24. PART 6 UNDER SANTA MONICA MUNICIPAL CODE CHAPTER 8.36

WHEREAS, scientific evidence has established that natural gas combustion, procurement and transportation produce significant greenhouse gas emissions that contribute to global warming and climate change; and

WHEREAS, the amendments to this Chapter are reasonably necessary because of health and safety concerns as City residents suffer from asthma and other health conditions associated with poor indoor and outdoor air quality exacerbated by the combustion of natural gas; and

WHEREAS, as a coastal city, Santa Monica is vulnerable to sea level rise, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, which contribute to melting of glaciers and thermal expansion of ocean water, resulting in rising sea levels; and

WHEREAS, consistent with the City's Climate Action & Adaptation Plan, this chapter establishes incentives for carbon-neutral construction, which will reduce

demands for local energy and resources, reduce regional pollution, and promote a lower contribution to greenhouse gases; and

WHEREAS, using electric heating and cooling infrastructure in new buildings fueled by less greenhouse gas intensive electricity is linked to significantly lower greenhouse gas emissions and is cost competitive because of the cost savings associated with all-electric designs that avoid new gas infrastructure; and

WHEREAS, the incentivization of electric building design benefits the health, welfare, and resiliency of Santa Monica and its residents; and

WHEREAS, the most cost-effective time to integrate electrical infrastructure is in the design phase of a building project because building systems and spaces can be designed to optimize the performance of electrical systems and the project can take full advantage of avoided costs and space requirements from the elimination of natural gas piping and venting for combustion air safety; and

WHEREAS, Public Resources Code (PRC) Section 25402.1(h)(2) and the California Energy Code, Title 24, Part 6, Section 10-106 establish a process by which local jurisdictions may adopt more stringent standards to the energy efficiency and conservation provisions in the California Energy Code, Title 24, Part 6, provided that the standards have been determined to be cost effective and will require buildings to be designed to consume no more energy than permitted by the California Energy Code; and

WHEREAS, staff has reviewed the "2022 Cost-Effectiveness Study: Single Family New Construction Study" and associated study data, the "2022 Cost-Effectiveness Study: Multifamily New Construction Study" and associated study data, and the "2022 Code: Non-Residential New Construction Reach Code Cost-Effectiveness Study" and

associated data developed for the California Energy Codes and Standards Statewide Utility Program, and find them sufficient to illustrate compliance with the requirements set forth under California Administrative Code Chapter 10-106; and

WHEREAS, the 2022 California Energy Code offers compliance options that were established through the public rulemaking process of the code update; and

WHEREAS, the Council expressly declares that the proposed amendments to the Energy Code are reasonably necessary because of local climatic and environmental conditions; and

WHEREAS, the content and details of this ordinance were the subject of a public stakeholder workshop conducted on April 3, 2024, at which attendees included architects, energy modelers, designers, builders, developers, and residents.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SANTA MONICA DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1 It is the purpose and intent of this Ordinance to establish standards for new buildings to exceed certain minimum 2022 Title 24 Part 6 requirements.

SECTION 2. Santa Monica Municipal Code Chapter 8.38 (Zero Emission Building Code) is hereby repealed in its entirety.

SECTION 3. The California Energy Code, Title 24, Part 6, adopted by the City of Santa Monica codified under Santa Monica Municipal Code Chapter 8.36.010 is hereby amended as follows:

Subchapter 1 – All Occupancies – General Provisions

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

ELECTRIC HEATING APPLIANCE. A device that produces heat energy to create a warm environment by the application of electric power to resistance elements, refrigerant compressors, or dissimilar material junctions, as defined in the California Mechanical Code.

NET FREE AREA (NFA) is the total unobstructed area within the air gaps between louver and grille slats in a vent, allowing the passage of air. The narrowest distance between two slats, perpendicular to the surface of both slats is the air gap height. The narrowest width of the gap is the air gap width. The NFA is the air gap height multiplied by the air gap width multiplied by the total number of air gaps between slats in the vent.

Subchapter 2 – Mandatory Requirements for Pool and Spa Systems and Equipment Section 110.4 is amended as follows:

- (a) **Certification by manufacturers.** Any pool or spa heating system or equipment heater for a pool, spa, or a pool and spa combination shall may be installed only if the manufacturer has certified that the system or equipment has all of the following:
 - <u>1.</u> Efficiency. For eEquipment subject to State or federal appliance efficiency standards, listings in the Commission's directory of certified equipment showing compliance with applicable standards shall comply with the applicable provisions of Section 110.1; and
 - 2. On-off switch. A readily accessible on-off switch, mounted on the outside of the heater that allows shutting off the heater without adjusting the thermostat setting; and

- 3. Instructions. A permanent, easily readable and weatherproof plate or card that provides the energy efficiency rating and gives instruction for the energy efficient operation of the pool and/or spa heater, and for the proper care of pool or spa water when a cover is used; and
- <u>4.</u> Electric resistance heating. No electric resistance heating.

Exception 1 to Section 110.4(a)4: Listed package units with fully insulated enclosures, and with tight-fitting covers that are insulated to at least R-6.

Exception 2 to Section 110.4(a)4: Pools or spas deriving at least 60

- (b) **Installation.** Any pool <u>and/</u>or spa system or equipment shall be installed with all of the <u>meet the</u> following <u>requirements</u>:
 - 1. **Heating Equipment**. Equipment installed to heat water for pools and/or spas shall be selected from equipment meeting the standards shown in Table 110.4-

Table 110.4-A HEATING EQUIPMENT STANDARDS

<u>Heating Energy Source</u>	<u>Standard</u>
Electric Resistance	<u>UL 1261</u>
Gas-fired	ANSI Z21.56/CSA 4.7a
Heat Pump	AHRI 1160 and one of the following: CSA
	C22.2 No. 236, UL 1995, or UL/CSA
	60335-2-40

Solar	ICC/APSP 902/SRCC 400 for solar pool
	heaters, ICC 901/SRCC 100 for solar
	<u>collectors</u>

- 24. **Piping.** At least 36 18 inches of <u>horizontal or vertical</u> pipe shall be installed between the filter and the heater or dedicated suction and return lines, or built-in or built-up connections shall be installed to allow for the future addition of solar heating equipment;
- 32. Covers. Outdoor pools and/or spa with electric or gas heating equipment shall be installed with a pool cover. A cover for outdoor pools and/or outdoor spas that have a heat pump or gas heater.; and
- <u>43</u>. **Directional inlets and time switches for pools**. If the system or equipment is for a pool:
- i. The pool shall have directional inlets that adequately mix the pool water; and
- ii. A time switch or similar control mechanism shall be <u>permanently</u> installed as part of a pool water circulation control system that will allow all pumps to be set or programmed to run only during off-peak electric demand period, and for the minimum time necessary to maintain the water in the condition required by applicable public health standards.
- (c) <u>Heating Source Sizing</u>. Heating systems or equipment for pool and/or spa shall meet one of the sizing requirements of 1 2, or 3through 5 below:

- A solar pool heating system with a solar collector surface area that is equivalent to the following:
 - A. For nonresidential and multifamily buildings, 65 percent or greater of the pool and/or spa surface area.
 - B. For single family buildings, 60 percent or greater of the pool and/or spa surface area;. or
- 2. A heat pump pool heater as the primary heating system that meets the sizing requirements of Reference Joint Appendix JA16.3. The control for the heat pump pool heater shall meet the requirements specified in section 110.2(b). The backup supplementary heater can be of any energy source; or
- A heating system that derives at least 60 percent of the annual heating energy
 from onsite renewable energy or on-site recovered energy.
- 4. A combination of a solar pool heating system and heat pump pool heater without any additional supplementary heater; or
- 5. A pool heating system determined by the Executive Director to use no more energy than the systems specified in Items 1, 2, 3, or 4 above.

Exception 1 to Section 110.4(c): Portable electric spas compliant with 20 CCR § 1605.3(g)(7) of the Appliance Efficiency Regulations.

Exception 2 to Section 110.4(c): Alterations to existing pools and/or spas with existing heating systems or equipment.

Exception 3 to Section 110.4(c): A pool and/or spa that is heated solely by a solar spool heating system without any backup heater.

Exception 4 to Section 110.4(c): Heating systems which are used exclusively for permanent spa applications in existing buildings with gas availability.

Exception 5 to Section 110.4(c): Heating systems which are used exclusively for permanent spa applications where there is inadequate sSolar Aaccess Roof Area (SARA) as specified in Section 150.1(c)14 for a solar pool heating system to be installed.

- (d) <u>Controls for Heat Pump Pool Heaters with Supplementary Heating</u>. Heat pump pool heaters with supplementary heaters shall have controls that meet the following:
 - 1. Supplementary heater shall not operate when the heating load can be met by the heat pump pool heater alone; and
 - 2. The cut-on temperature for heat pump heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for heat pump heating is higher than the cut-off temperature for supplementary heating.

<u>Subchapter 3 – Nonresidential Hotel/Motel Occupancies, and Covered Processes</u>

<u>– Mandatory Requirements</u>

Section 120.2 Required Controls for Space Conditioning Systems is amended to add Section 120.2(I) as follows:

(I) **HVAC Hot Water Temperature. Zones** that use hot water for space heating shall be designed for a hot water supply temperature of no greater than 130 °F.

Section 120.6 Mandatory Requirements for Covered Processes is amended to add Section 120.6(k) as follows:

- (k) Mandatory requirements for commercial kitchens. Electric Readiness for Newly Constructed Commercial Kitchens shall meet the following requirements:
 - 1. Quick-service commercial kitchens and institutional commercial kitchens shall include a dedicated branch circuit wiring and outlet that would be accessible to cookline appliances and shall meet all of the following requirements:
 - a. The branch circuit conductors shall be rated at 50 amps minimum.
 - b. The electrical service panel shall have a minimum capacity of 800 connected amps.
 - 2. The electrical service panel shall be sized to accommodate an additional either 208v or 240v 50-amp breaker.

EXCEPTION 1 to Section 120.6(k): healthcare facilities.

EXCEPTION 2 to Section 120.6(k): all-electric commercial kitchens.

Subchapter 4 – Nonresidential and Hotel/Motel Occupancies

Section 130.0 is amended 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 130.5130.6.

NOTE: The requirements of Sections 130.0 through 130.5130.6 apply to newly constructed buildings. Section 141.0 specifies which requirements of Sections 130.0 through 130.5130.6 also apply to additions and alterations to existing buildings.

Add Section 130.6 - Electric Readiness for Systems Using Gas or Propane:

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

- 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; and
- b) <u>Labeling of both ends of the unused conductors or conduit shall be with "For Future Electrical Appliance"</u>; and
- 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; and

- d) Connected subpanels, panelboards, switchboards, busbars, and transformers shall be 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; and
- 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), 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 combustion equipment.

Subchapter 5 – Nonresidential and Hotel/Motel Occupancies

Section 140.0 - Performance and Prescriptive Compliance Approaches is amended as follows:

Nonresidential and hotel/motel buildings shall comply with all of the following:

- a) The requirements of Sections 100.0 through 110.12 applicable to the building project (mandatory measures for all buildings).
- b) The requirements of Sections 120.0 through 130.56 (mandatory measures for nonresidential, and high-rise residential and hotel/motel buildings).
- c) Either the performance compliance approach (energy budgets) specified in Section 140.1 or the prescriptive compliance approach specified in Section 140.2 for the climate zone in which the building will be located. Climate zones are shown in FIGURE 100.1-A.

NOTE to Section 140.0(c): The Commission periodically updates, publishes and makes available to interested persons and local enforcement agencies precise descriptions of the climate zones, which is available by zip code boundaries depicted in the Reference Joint Appendices along with a list of the communities in each zone.

NOTE to Section 140.0: The requirements of Sections 140.1 through 140.910 apply to newly constructed buildings. Section 141.0 specifies which requirements of Section 140.1 through 140.910 also apply to additions or alterations to existing buildings.

Section 140.1 Performance Approach: Energy Budgets is amended as follows:

A building complies with the performance approach if provided that:

- The time-dependent valuation (TDV) energy budget calculated for the Proposed
 Design Building under Subsection (b) is no greater than the TDV energy budget
 calculated for the Standard Design Building under Subsection (a), and
- 2. The source energy budget calculated for the proposed design building under Subsection (b) has a source energy compliance margin, relative to the source energy budget calculated for the standard design building under Subsection (a), of at least 7% for hotels, 2% for restaurants, 14% for office, and 7% for all other nonresidential occupancies.

<u>is required when nonresidential occupancies are designed with single zone space-conditioning systems complying with Section 140.4(a)2.</u>

(a) - (c) Subsections 140.1 (a) - (c) are adopted without modification.

Subchapter 7 - Single-Family Residential Buildings

Section 150.0 Mandatory Features and Devices is amended as follows:

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

NOTE: The requirements of Sections 150.0(a) through 150.0($\underline{r_V}$) 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. <u>The</u> amendments to sections 150.0 (t) do not apply to additions or alterations.

(a) - (s): Subsections 150.0(a) - (s) are adopted without modification.

Section 150.0(t) of Section 150.0 Mandatory Features and Devices is amended as follows:

- (t) **Heat pump space heater ready.** Systems using 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.
 - (u) (v): Subsections 150.0(u) (v) are adopted without modification.

Subchapter 8 – Single-Family Residential Buildings

Section 150.1 Performance and Prescriptive Compliance Approaches for Single-Family Residential Buildings is amended as follows:

- (a) Section (a) is adopted without modification.
- (b) **Performance Standards Approach**. A building complies with the performance standards approach if the energy consumption calculated for the proposed design building is no greater than the energy budget calculated for the standard design building using Commission-certified compliance software as specified by the Alternative Calculation Methods Approval Manual, as specified in sub-sections 1, 2 and 3 below.
 - Newly Constructed Buildings. The Energy Budget for newly constructed buildings is expressed in terms of the Energy Design Ratings, which are based on source energy and time-dependent valuation (TDV) energy. The Energy Design Rating 1 (EDR1) is based on source energy. The Energy Design Rating 2 (EDR2) is based on TDV energy and has two components, the Energy Efficiency Design Rating, and the Solar Electric Generation and Demand Flexibility Design Rating. The total Energy Design Rating shall account for both the Energy Efficiency Design Rating and the Solar Electric

Generation and Demand Flexibility Design Rating. The proposed building shall separately comply with the Source Energy Design Rating, Energy Efficiency Design Rating and the Total Energy Design Rating. A building complies with the performance approach if the TDV energy budget calculated for the proposed design building is no greater than the TDV energy budget calculated for the Standard Design Building AND Source Energy compliance margin of at least 5.0 relative to the Source Energy Design Rating 1 calculated for the Standard Design building.

EXCEPTION 1 to Section 150.1(b)1. A community shared solar electric generation system, or other renewable electric generation system, and/or community shared battery storage system, which provides dedicated power, utility energy reduction credits, or payments for energy bill reductions, to the permitted building and is approved by the Energy Commission as specified in Title 24, Part 1, Section 10-115, may offset part or all of the solar electric generation system Energy Design Rating required to comply with the Standards, as calculated according to methods established by the Commission in the Residential ACM Reference Manual.

EXCEPTION 2 to Section 150.1(b)1. A newly constructed building with a conditioned floor area less than 1,500 square feet shall achieve a Source Energy compliance margin of 2.0 or greater, relative to the Source Energy Design Rating 1 calculated for the Standard Design building.

<u>exception 3 to Section 150.1(b)1.</u> If a newly constructed building with a conditioned floor area less than 625 square feet demonstrates that due to conditions specific to the project, it is technically infeasible to achieve

compliance, the Building Official may reduce the minimum Source Energy compliance margin to between 0 and 2.0, relative to the Source Energy Design Rating 1 calculated for the Standard Design building.

- Additions and Alterations to Existing Buildings. The Energy Budget for additions and alterations is expressed in terms of TDV energy.
- 3. Section (b)(3) is adopted without modification.

Section (c) is adopted without modification.

Subchapter 10 - Multifamily Buildings - Mandatory Requirements

Section 160.4 Mandatory Requirements for Water Heating systems is amended to remove subsection (a) as follows:

- (a) Reserved. Systems using gas or propane water heaters to serve individual dwelling units shall include the following components:
- 1. 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, within 3 feet from the water heater and accessible to the water heater with no obstructions. In addition, all of the following:
- A. Both ends of the unused conductor shall be labeled with the word "spare" and be electrically isolated; and

- B. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "Future 240V Use"; and
- 2. A Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; and
- 3. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance; and
- 4. A gas supply line with a capacity of at least 200,000 Btu/hr.

Sections (b) to (f) are adopted without amendments.

Section 160.9 Mandatory Requirements for Electric Ready Buildings

Section 160.9 Sections (a) to (c) are adopted without amendments. Sections (d) through (f) are added as follows:

- d) Systems using gas or propane water heaters to serve individual dwelling units shall include the following components:
 - A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor, copper branch circuit rated to 30 amps, within 3 feet from the water heater and accessible to the water heater with no obstructions. In addition, all of the following:
 - A. <u>Both ends of the unused conductor shall be labeled with the word "spare"</u> and be electrically isolated; and

- B. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "Future 240V Use";
- A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance,
- 3. The construction drawings shall indicate the location of the future heat pump water heater. The reserved location shall have minimum interior dimensions of 39"x39"x96"
- 4. A ventilation method meeting one of the following:
 - A. The location reserved for the future heat pump water heater shall have a minimum volume of 700 cu. ft.,
 - B. The location reserved for the future heat pump water heater shall vent to a communicating space in the same pressure boundary via permanent openings with a minimum total net free area of 250 sq. in., so that the total combined volume connected via permanent openings is 700 cu. ft. or larger. The permanent openings shall be:
 - Fully louvered doors with fixed louvers consisting of a single layer of fixed flat slats; or
 - ii. Two permanent fixed openings, consisting of a single layer of fixed flat slat louvers or grilles, one commencing within 12 inches from the top of the enclosure and one commencing within 12 inches from the bottom of the enclosure.

- C. The location reserved for the future heat pump water heater shall include two 8" capped ducts, venting to the building exterior.
 - i. All ducts connections and building penetrations shall be sealed.
 - ii. Exhaust air ducts and all ducts which cross pressure boundaries shall
 be insulated to a minimum insulation level of R-6
 - iii. Airflow from termination points shall be diverted away from each other.
- e) <u>Central Heat Pump Water Heater Electric Ready.</u> Central water heating systems using gas or propane to serve multiple dwelling units shall include the following:
 - The system input capacity of the gas or propane water heating system shall be determined as the sum of the input gas or propane capacity of all water heating devices associated with each gas or propane water heating system.
 - 2. Space reserved shall include:
 - A. <u>Heat Pump. The minimum space reserved shall include space</u>

 for service clearances, air flow clearances, and keep outs and shall meet one of the following:
 - i. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, the minimum space reserved for the heat pump shall be 2.0 square feet per input 10,000 BTU per hour of the gas or propane water heating system, and the minimum linear dimension of the space reserved shall be 48 linear inches.
 - ii. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, the minimum space reserved for the heat pump shall be 3.6

- square feet per input 10,000 BTU per hour of the gas or propane water heating system, and the minimum linear dimension of the space reserved shall be 84 linear inches.
- iii. The space reserved shall be the space required for a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.
- B. <u>Tanks</u>. The minimum space reserved shall include space for service clearances and keep outs and shall meet one of the following:
 - i. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, the minimum space reserved for the storage and temperature maintenance tanks shall be 4.4 square feet per input 10,000 BTU per hour. of the gas or propane water heating system.
 - ii. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, the minimum physical space reserved for the storage and temperature maintenance tanks shall be 3.1 square feet per input 10,000 BTU per hour. of the gas or propane water heating system.
 - iii. The space reserved shall be the space required for a heat pump water heater system that meets the total building hot

water demand as calculated and documented by the responsible person associated with the project.

- 3. Ventilation shall be provided by meeting one of the following:
 - A. <u>Physical space reserved for the heat pump shall be located</u> outside, or
 - B. A pathway shall be reserved for future routing of supply and exhaust air via ductwork from the reserved heat pump location to an appropriate outdoor location. Penetrations through the building envelope for louvers and ducts shall be planned and identified for future use. The reserved pathway and penetrations through the building envelope shall be sized to meet one of the following:
 - i. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, the minimum air flow rate shall be 70 CFM per input 10,000 BTU per hour of the gas or propane water heating system and the total external static pressure drop of ductwork and louvers shall not exceed 0.17 inch when the future heat pump water heater is installed.
 - ii. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, the minimum air flow rate shall be 420 CFM per input 10,000 BTU per hour of the gas or propane water heating system and the total external static pressure drop of ductwork and louvers shall not exceed 0.17 inch when the future heat pump water heater is installed.

- iii. The reserved pathway and penetrations shall be sized to serve a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.
- 4. Condensate drainage piping. An approved receptacle that is sized in accordance with the California Plumbing Code to receive the condensate drainage shall be installed within 3 feet of the reserved heat pump location, or piping shall be installed from within 3 feet of the reserved heat pump location to an approved discharge location that is sized in accordance with the California Plumbing Code, and meets one of the following:
 - A. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, condensate drainage shall be sized for 0.2 tons of refrigeration capacity per input 10,000 BTU per hour
 - B. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, condensate drainage shall be sized for 0.7 tons of refrigeration capacity per input 10,000 BTU per hour
 - C. Condensate drainage shall be sized to serve a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.

5. Electrical.

A. <u>Physical space shall be reserved on the bus system of the main</u> <u>switchboard or on the bus system of a distribution board to serve the</u> future heat pump water heater system including the heat pump and temperature maintenance tanks. In addition, the physical space reserved shall be capable of providing adequate power to the future heat pump water heater as follows:

- i. Heat Pump. For the Heat Pump, the physical space reserved shall comply with one of the following:
 - A. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, provide 0.1 kVA per input 10,000 BTU per hour
 - B. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, provide 1.1 kVA per input 10,000 BTU per hour
 - C. The physical space reserved supplies sufficient electrical power required to power a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.
- ii. <u>Temperature Maintenance Tank. For the Temperature</u>

 <u>Maintenance Tank, the physical space reserved shall comply</u>

 <u>with one of the following:</u>
 - A. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, provide 1.0 kVA per input 10,000 BTU per hour

- B. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, provide 0.6 kVA per input 10,000 BTU per hour
- C. The physical space reserved supplies sufficient electrical power required to power a heat pump water heater system that meets the total building hot water demand as calculated and documented by the responsible person associated with the project.
- (f) The building electrical system shall be sized to meet the future electric requirements of the electric ready equipment specified in sections 160.9 a e. To meet this requirement the building main service conduit, the electrical system to the point specified in each subsection, and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each electric ready appliance in accordance with the California Electric Code.

Subchapter 11 - Multifamily Buildings

Amend Section 170.1 - Performance Approach - as follows:

A building complies with the performance approach if the <u>TDV</u> energy budget calculated for the Proposed Design Building under Subsection (b) is no greater than the <u>TDV</u> energy budget calculated for the Standard Design Building under Subsection (a). <u>Additionally, the energy budget, expressed in terms of source energy, of a newly constructed multifamily building with three habitable stories or less shall be at least 7 percent lower than that of the Standard Design Building. Newly Constructed multifamily buildings with</u>

four habitable stories or more shall be at least 3 percent lower than that of the Standard Design Building.

Sub-sections (a) to (d) are adopted without amendments.

SECTION 4. Any provision of the Santa Monica Municipal Code or appendices thereto inconsistent with the provisions of this Ordinance, to the extent of such inconsistencies and no further, is hereby repealed or modified to that extent necessary to effect the provisions of this Ordinance.

SECTION 5. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any 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 this Ordinance and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 6. The Mayor shall sign and the City Clerk shall attest to the passage of the Ordinance. The City Clerk shall cause the same to be published once in the official newspaper within 15 days after its adoption. This Ordinance shall become effective thirty days after adoption. Building permit applications submitted on or after the effective date of this Ordinance shall be required to comply with the requirements set forth herein.

APPROVED AS TO FORM:

Douglas Sloan, City Attorney