ORDINANCE NO. 20250410-044

AN ORDINANCE REPEALING AND REPLACING ARTICLE 5 OF CITY CODE CHAPTER 25-12 (*TECHNICAL CODES*) TO ADOPT THE 2024 UNIFORM MECHANICAL CODE AND LOCAL AMENDMENTS; AND CREATING OFFENSES.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. City Code Chapter 25-12 (*Technical Codes*) is amended to repeal Article 5 (*Mechanical Code*) and replace it with a new Article 5 to read as follows:

ARTICLE 5. MECHANICAL CODE.

§ 25-12-131 UNIFORM MECHANICAL CODE.

- (A) The Uniform Mechanical Code, 2024 Edition, published by the International Association of Plumbing and Mechanical Officials Council ("2024 Uniform Mechanical Code") is adopted and incorporated by reference into this section with the deletions in Subsections (B) and the amendments in Section 25-12-133 (*Local Amendments to the Uniform Mechanical Code*).
- (B) The following provisions of the 2024 Uniform Mechanical Code are deleted. Unless specifically listed in this table, a subsection contained within a deleted section or subsection is not deleted:

Section 104.2	Section 104.3.3	Section 104.4.3	
Section 104.4.4	Section 104.5 and associated	Section 107.0	
	subsections		
Table 104.5	Section 303.8.4 and	Section 403.10	
я	associated subsections		
Section 405.4.1	Section 504.4.2 and	Section 609.0 and	
	associated subsection	associated subsections	
Section 939.0	Section 1126.0	Chapter 13	

(C) The city clerk shall retain a copy of the 2024 Uniform Mechanical Code with the official ordinances of the City.

\S 25-12-132 CITATIONS TO THE UNIFORM MECHNICAL CODE.

In the City Code, "Mechanical Code" means the 2024 Uniform Mechanical Code adopted by Section 25-12-131 (*Uniform Mechanical Code*) and as amended by Section 25-12-133 (*Local Amendments to the Uniform Mechanical Code*). In this article, "this code" means the Uniform Mechanical Code.

§ 25-12-133 LOCAL AMENDMENTS TO THE UNIFORM MECHANICAL CODE.

The following provisions are local amendments to the commercial provisions of the 2024 Uniform Mechanical Code. Each provision in this section is a substitute for an identically numbered provision deleted by Section 25-12-131(B) or an addition to the 2024 Uniform Mechanical Code.

Chapter 1 Administration

104.1.1 Commercial Mechanical Change-Out Program. For buildings not covered under the Residential Code, the building official may establish, by rule, an inspection program for commercial mechanical components identified in this section or a change-out program authorized in other technical or building codes. The buildings must be located within the zoning jurisdiction of the City, outside of the zoning jurisdiction under agreement with a municipal utility district, where the City provides electrical service, or as determined by the building official.

104.2 Exempt Work. A mechanical permit is not required for the work described in this provision. Work exempt from a permit must still comply with this code and all other applicable laws and City Code requirements.

- 1. A portable heating appliance, portable ventilating equipment, a portable cooling unit, or a portable evaporative cooler.
- 2. Replacing a component part that does not alter the original approval and complies with other applicable requirements of this code.
- 3. Refrigerating equipment that is part of equipment subject to a permit issued under this code.
- 4. Replacement or relocation of controls and thermostats (less than 24 volts).
- 5. Installing self-contained refrigerators or freezers.
- 6. Servicing and repairing ice machines.
- 7. Relocation of return and supply grilles within range of existing duct lengths if they remain within the same space.
- 8. Other work as determined by the building official.

104.3.3 Time Limits. Article 13 (*Administration of Technical Codes*) of Chapter 25-12 (*Technical Codes*) establishes permit application time limits and requirements applicable to permit expiration and reactivation, including a review fee for expired permits.

104.5 Fees. Fees applicable to this code are set by a separate ordinance.

104.6 Registration of Air Conditioning and Refrigeration Contractors. An air conditioning and refrigeration contractor must register with the City before performing work regulated by this code. A contractor must provide the contractor's name and State of Texas license number. A contractor must pay a registration fee, established by separate ordinance, for an initial registration, registration after a license suspension, and registration after the license expires. A new registration fee is not required to renew a license that is not suspended or expired.

107.0 Appeals. A person aggrieved by an order, decision, or determination of the building official related to an application or interpretation of this code may appeal the order, decision, or determination consistent with the procedures set forth in Chapter 25-1, Article 7, Division 1 (*Appeals*). The Mechanical and Plumbing Board, established in Section 2-1-161 (*Mechanical and Plumbing Board*), hears appeals authorized by this section.

Chapter 2 Definitions.

202.1.1 Amended and Supplemented Definitions. The definitions in this subsection apply throughout this code and amend or supplement the definitions in Chapter 2.

Bleed-off (Blowdown). The circulating water in a cooling tower which is discharged to help keep the dissolved solids in the water below a maximum allowable concentration limit.

Blow-Down Meter. A meter that tracks the amount of water discharged from a cooling tower system.

Concentration. The recirculated water in a cooling tower that has elevated levels of total dissolved solids as compared to the original make-up water.

Conductivity Controller. A device used to measure the conductivity of total dissolved solids in the water of a cooling system to control the discharge of water in order to maintain efficiency.

Cooling Tower. An open- or closed-loop water recirculation system that uses fans or natural draft to force or draw air to contact and cool water through the evaporative process that removes heat from water-cooled A/C systems and from industrial processes.

Cycle of Concentration. The ratio of the dissolved solids in recirculating water to the dissolved solids in the makeup water.

Drift Eliminator. A device that captures large water droplets caught in the cooling tower air stream to prevent the water droplets and mist from escaping the cooling tower.

Insanitary Location. An area, space, public/private balcony, or room where the air is unfit or undesirable for circulation to occupiable parts of a building.

Makeup. The amount of water required to replace normal losses caused by bleed-off (blowdown), drift, and evaporation.

Makeup Meter. A meter that measures the amount of water entering a cooling tower system.

Overflow Alarm. A system that includes a level switch and an electronic signaling device that sends an audible signal or provides an alert via the energy management control system to the tower operator in case of sump overflow.

Chapter 3 General Regulations.

303.8.4 Roof Drainage and Rails. Equipment shall be installed on a well-drained surface of the roof. Guards must be provided where an appliance, equipment, fan, solar system, or other components require service and are located within 10 feet (3,048 mm) of a roof edge or open side of a walking surface and the edge or walking surface is located 30 inches above the grade below. Rigid fixed rails or guards at least 42 inches (1,067 mm) in height must be provided on the exposed side. The guard must be constructed to prevent a 21-inch-diameter (533 mm) sphere from passing through and must extend at least 30 inches (762 mm) beyond each end of the appliance, equipment, fan, or component. If a parapet or other building structure is used in lieu of a guard, it must be at least 42 inches (1,067 mm) in height.

Exception: Guards shall not be required where a permanent fall arrest anchorage connector system in accordance with ASSE Z359.1 is installed.

304.3.1.2.1 Ladders. Permanent ladders to access equipment located on a roof shall be provided at parapet walls that exceed 30 inches in height.

304.4.5 Concealed Space Designed for Appliances. An unobstructed access panel with a minimum of 22 inches by 30 inches at each point of maintenance and repair access shall be required. An opening as large as the largest component of an appliance is not required if:

- 1. the largest appliance can be removed by other means;
- 2. a plan for removal of the appliance is clearly documented on the approved plans; and
- 3. fire protection components, any part of the electrical installation, or structural load resisting systems and plumbing are not being affected.

310.1.2 Sling-Style Equipment. Sling-style A/C equipment that reintroduces condensation back into the atmosphere is prohibited.

318 Cooling Systems. Interior spaces intended for human occupancy shall be provided with active or passive cooling systems capable of maintaining an indoor temperature of not more than 80°F (27°C) at a point three feet (914 mm) above floor on the design cooling day. The installation of portable cooling systems shall not be used to achieve compliance with this section.

Exceptions:

- 1. Interior spaces where the primary purpose is not associated with human comfort.
- 2. Group F, H, S, and U occupancies.

Chapter 4 Ventilation Air.

403.7.3 Occupied Spaces Accessory to Public Garages. Connecting offices, waiting rooms, ticket booths, and similar uses accessory to a public garage must be maintained at a positive pressure and must include ventilation consistent with Section 403.0 Ventilation Rates.

405.4.1 Residential Kitchen Exhaust Rate. For intermittent-controlled operations, the exhaust rate shall be not less than 100 ft3/min (47.2 L/s) and 300 ft3/min (142 L/s) for downdraft appliances. For continuous operation the exhaust rate shall be not less than 50 ft3/min (23.6 L/s).

Chapter 5 Exhaust Systems.

- 504.1.2 Environmental Exhaust Duct Termination Over Covered Walkway. An exhaust duct serving a domestic clothes dryer shall not terminate over a covered walkway unless the duct is extended to the outer edge of the covered walkway.
 - 1. An exhaust duct serving a domestic range or bathroom exhaust fan shall not terminate over a covered walkway unless three sides are open for dilution air movement.
 - Exception: If adequate dilution air cannot be provided, an exhaust duct serving a domestic range or bathroom exhaust fan shall be extended to the outer edge of the covered walkway.
 - 2. An exhaust duct shall terminate over a private use balcony if the balcony serves the same space or dwelling unit as the duct serves and required clearances from openings are maintained.

504.4.2 Domestic Cloth Dryers. Section 504, subsections, and associated tables and references and duct support requirements in Subsection B of the International Mechanical Code, 2024 Edition, apply to a clothes dryer installation. Alternatively, clothes dryer installation may qualify as an alternate engineered system if it meets the requirements of this section.

- 1. Alternate Engineered Systems. If the dryer duct system is designed by a professional engineer, the system must comply with ANSI Z21.5.I/CSA 7.1. The design professional must provide calculations and design criteria on plans submitted under Section 104.0 of this code and must demonstrate dryer vent system is equivalent to a system that complies with the International Mechanical Code, 2024 Edition.
- 2. Duct Supports. Ducts shall be supported in accordance with SMACNA HVAC Duct Construction Standards Metal and Flexible.

520.0 Hazardous Materials. Sections 502.8 through 502.8.5., associated tables and referenced sections of the International Mechanical Code, 2024 Edition, shall apply except for Section 502.8.4 that is replaced with the following:

Where gases, liquids, or solids in amounts exceeding the maximum allowable quantity per control area and having a hazard ranking of 2, 3, or 4 accordance with NFPA 704 are dispensed or used, mechanical exhaust ventilation shall be provided to capture gases, fumes, mists, or vapors at the point of generation.

- 521.0 Hazardous Materials Requirements for Specific Materials. Section 502.9, subsections, associated tables, and referenced sections of the International Mechanical Code, 2024 Edition, apply.
- 522.0 Hazardous Production Materials (HPM). Section 502.10, subsections, associated tables and referenced sections of the International Mechanical Code, 2024 Edition, apply.
- 523.0 Hazardous Exhaust Systems. Section 509, subsections, and associated tables and referenced sections of the International Mechanical Code, 2024 Edition, apply.
- 524.0 Manicure and pedicure stations Section 502.20, subsections, and associated tables and referenced sections of the International Mechanical Code, 2024 Edition, apply.

Chapter 6 Duct Systems.

603.10.1 Cross Contamination. A non-hazardous duct under positive or negative pressure may be routed through a duct or plenum or occupied space when longitudinal and traverse joints (seal class A per SMACNA) are sealed with materials designed for that use and sealed consistent with acceptable methods.

609 Smoke Detection Systems Control. Section 606, subsections, and associated tables and referenced sections of the International Mechanical Code, 2024 Edition apply.

Chapter 9 Installation of Specific Appliances

939.0 Sauna Heaters. Section 914, subsections, and associated tables and references of the International Mechanical Code, 2024 Edition, apply.

Chapter 10 Boilers and Pressure Vessels.

1015.0 Efficiency Standards for Steam Boilers. A steam boiler shall:

- 1. Be equipped with conductivity controllers that control blowdown and a coldwater makeup meter. If the system is a 50 Boiler Horsepower or greater, the meter must be connected to the building's energy management system or utility monitoring dashboard;
- 2. Include a steam condensate return system;
- 3. Be fitted with a blowdown heat exchanger to transfer heat from blowdown to the feed water; and
- 4. If the boiler exceeds 15 psi and 100 Boiler Horsepower, and the heat recovery can be used to heat boiler makeup water or other purposes, the boiler blowdown must be directed to a heat recovery system that reduces the temperature of the blowdown discharge to below 140 degrees Fahrenheit without using tempering water.

Chapter 11 Refrigeration.

1126.0 Standards for Cooling Towers.

- 1. A cooling tower shall:
 - a. Achieve a minimum of five cycles of concentration if the cooling tower utilizes potable water as its primary source of make-up water;
 - b. Be fitted with overflow sensors and alarms, make-up water, and blowdown meters to manage water consumption, and conductivity controllers;
 - c. Be equipped with drift eliminators with a drift rate of not more than 0.005% of the circulated water flow rate for crossflow towers and 0.002% for counterflow towers when operated consistent with the

- equipment manufacturer's instructions and with the cooling tower, evaporative condensers, and fluid coolers; and
- d. If the cooling tower is 100 tons or more, the make-up and blowdown meters and overflow alarm shall be connected to the building's central energy management system or utility monitoring dashboard.
- 2. A biocide shall be used to treat the cooling system recirculation to minimize the growth of Legionella and other microorganisms and to increase water use efficiency.
- 3. Commercial and multifamily facilities constructed after September 5, 2017, with an evaporative cooling tower system with a combined cooling capacity equal to or greater than 100 tons, shall have a minimum of 10 percent of the cooling tower make-up water offset with reclaimed or onsite water reuse.

PART 2. This ordinance takes effect on July 10, 2025.

PASSED	AND	APPRO	VED

April 10 , 2025

Kirk Watson

Kirk Watson Mayor

APPROVED: /

Deborah Thomas
Interim City Attorney

ATTEST:

Myrna Rios City Clerk