

ORDINANCE NO.

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 subsections	Section 107.0
Table 104.5	Section 303.8.4 and associated subsections	Section 403.10
Section 405.4.1	Section 504.4.2 and associated subsection	Section 609.0 and 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.

§ 25-12-132 CITATIONS TO THE UNIFORM MECHANICAL 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 25-12-133 (*Local Amendments to the Uniform Mechanical Code*). In this article, "this
26 code" means the Uniform Mechanical Code.

27 **§ 25-12-133 LOCAL AMENDMENTS TO THE UNIFORM MECHANICAL**
28 **CODE.**

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

33 **Chapter 1 Administration**

34 104.1.1 Commercial Mechanical Change-Out Program. For buildings not covered under
35 the Residential Code, the building official may establish, by rule, an inspection program
36 for commercial mechanical components identified in this section or a change-out
37 program authorized in other technical or building codes. The buildings must be located
38 within the zoning jurisdiction of the City, outside of the zoning jurisdiction under
39 agreement with a municipal utility district, where the City provides electrical service, or
40 as determined by the building official.

41 104.2 Exempt Work. A mechanical permit is not required for the work described in this
42 provision. Work exempt from a permit must still comply with this code and all other
43 applicable laws and City Code requirements.

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

56 104.3.3 Time Limits. Article 13 (*Administration of Technical Codes*) of Chapter 25-12
57 (*Technical Codes*) establishes permit application time limits and requirements applicable
58 to permit expiration and reactivation, including a review fee for expired permits.

59 104.5 Fees. Fees applicable to this code are set by a separate ordinance.

60 104.6 Registration of Air Conditioning and Refrigeration Contractors. An air
61 conditioning and refrigeration contractor must register with the City before performing
62 work regulated by this code. A contractor must provide the contractor's name and State
63 of Texas license number. A contractor must pay a registration fee, established by separate
64 ordinance, for an initial registration, registration after a license suspension, and
65 registration after the license expires. A new registration fee is not required to renew a
66 license that is not suspended or expired.

67 107.0 Appeals. A person aggrieved by an order, decision, or determination of the
68 building official related to an application or interpretation of this code may appeal the
69 order, decision, or determination consistent with the procedures set forth in Chapter 25-1,
70 Article 7, Division 1 (*Appeals*). The Mechanical and Plumbing Board, established in
71 Section 2-1-161 (*Mechanical and Plumbing Board*), hears appeals authorized by this
72 section.

73 **Chapter 2 Definitions.**

74 202.1.1 Amended and Supplemented Definitions. The definitions in this subsection apply
75 throughout this code and amend or supplement the definitions in Chapter 2.

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

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

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

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

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

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

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

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

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

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

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

102 **Chapter 3 General Regulations.**

103 303.8.4 Roof Drainage and Rails. Equipment shall be installed on a well-drained surface
104 of the roof. Guards must be provided where an appliance, equipment, fan, solar system,
105 or other components require service and are located within 10 feet (3,048 mm) of a roof
106 edge or open side of a walking surface and the edge or walking surface is located 30
107 inches above the grade below. Rigid fixed rails or guards at least 42 inches (1,067 mm) in
108 height must be provided on the exposed side. The guard must be constructed to prevent a
109 21-inch-diameter (533 mm) sphere from passing through and must extend at least 30
110 inches (762 mm) beyond each end of the appliance, equipment, fan, or component. If a
111 parapet or other building structure is used in lieu of a guard, it must be at least 42 inches
112 (1,067 mm) in height.

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

115 304.3.1.2.1 Ladders. Permanent ladders to access equipment located on a roof shall be
116 provided at parapet walls that exceed 30 inches in height.

117 304.4.5 Concealed Space Designed for Appliances. An unobstructed access panel with a
118 minimum of 22 inches by 30 inches at each point of maintenance and repair access shall
119 be required. An opening as large as the largest component of an appliance is not required
120 if:

121 1. the largest appliance can be removed by other means;

- 122 2. a plan for removal of the appliance is clearly documented on the approved
123 plans; and
- 124 3. fire protection components, any part of the electrical installation, or
125 structural load resisting systems and plumbing are not being affected.

126 310.1.2 Sling-Style Equipment. Sling-style A/C equipment that reintroduces
127 condensation back into the atmosphere is prohibited.

128 318 Cooling Systems. Interior spaces intended for human occupancy shall be provided
129 with active or passive cooling systems capable of maintaining an indoor temperature of
130 not more than 80°F (27°C) at a point three feet (914 mm) above floor on the design
131 cooling day. The installation of portable cooling systems shall not be used to achieve
132 compliance with this section.

133 Exceptions:

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

137 **Chapter 4 Ventilation Air.**

138 403.7.3 Occupied Spaces Accessory to Public Garages. Connecting offices, waiting
139 rooms, ticket booths, and similar uses accessory to a public garage must be maintained at
140 a positive pressure and must include ventilation consistent with Section 403.0 Ventilation
141 Rates.

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

146 **Chapter 5 Exhaust Systems.**

147 504.1.2 Environmental Exhaust Duct Termination Over Covered Walkway. An exhaust
148 duct serving a domestic clothes dryer shall not terminate over a covered walkway unless
149 the duct is extended to the outer edge of the covered walkway.

- 150 1. An exhaust duct serving a domestic range or bathroom exhaust fan shall not
151 terminate over a covered walkway unless three sides are open for dilution air
152 movement.

153 Exception: If adequate dilution air cannot be provided, an exhaust duct
154 serving a domestic range or bathroom exhaust fan shall be extended to the
155 outer edge of the covered walkway.

- 156 2. An exhaust duct shall terminate over a private use balcony if the balcony
157 serves the same space or dwelling unit as the duct serves and required
158 clearances from openings are maintained.

159 504.4.2 Domestic Cloth Dryers. Section 504, subsections, and associated tables and
160 references and duct support requirements in Subsection B of the International Mechanical
161 Code, 2024 Edition, apply to a clothes dryer installation. Alternatively, clothes dryer
162 installation may qualify as an alternate engineered system if it meets the requirements of
163 this section.

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

172 520.0 Hazardous Materials. Sections 502.8 through 502.8.5., associated tables and
173 referenced sections of the International Mechanical Code, 2024 Edition, shall apply
174 except for Section 502.8.4 that is replaced with the following:

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

179 521.0 Hazardous Materials - Requirements for Specific Materials. Section 502.9,
180 subsections, associated tables, and referenced sections of the International Mechanical
181 Code, 2024 Edition, apply.

182 522.0 Hazardous Production Materials (HPM). Section 502.10, subsections, associated
183 tables and referenced sections of the International Mechanical Code, 2024 Edition, apply.

184 523.0 Hazardous Exhaust Systems. Section 509, subsections, and associated tables and
185 referenced sections of the International Mechanical Code, 2024 Edition, apply.

186 524.0 Manicure and pedicure stations Section 502.20, subsections, and associated tables
187 and referenced sections of the International Mechanical Code, 2024 Edition, apply.

188 **Chapter 6 Duct Systems.**

189 603.10.1 Cross Contamination. A non-hazardous duct under positive or negative pressure
190 may be routed through a duct or plenum or occupied space when longitudinal and
191 traverse joints (seal class A per SMACNA) are sealed with materials designed for that
192 use and sealed consistent with acceptable methods.

193 609 Smoke Detection Systems Control. Section 606, subsections, and associated tables
194 and referenced sections of the International Mechanical Code, 2024 Edition apply.

195 **Chapter 9 Installation of Specific Appliances**

196 939.0 Sauna Heaters. Section 914, subsections, and associated tables and references of
197 the International Mechanical Code, 2024 Edition, apply.

198 **Chapter 10 Boilers and Pressure Vessels.**

199 1015.0 Efficiency Standards for Steam Boilers. A steam boiler shall:

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

212 **Chapter 11 Refrigeration.**

213 1126.0 Standards for Cooling Towers.

- 214 1. A cooling tower shall:

- 215 a. Achieve a minimum of five cycles of concentration if the cooling
216 tower utilizes potable water as its primary source of make-up water;
- 217 b. Be fitted with overflow sensors and alarms, make-up water, and
218 blowdown meters to manage water consumption, and conductivity
219 controllers;
- 220 c. Be equipped with drift eliminators with a drift rate of not more than
221 0.005% of the circulated water flow rate for crossflow towers and
222 0.002% for counterflow towers when operated consistent with the
223 equipment manufacturer's instructions and with the cooling tower,
224 evaporative condensers, and fluid coolers; and
- 225 d. If the cooling tower is 100 tons or more, the make-up and blowdown
226 meters and overflow alarm shall be connected to the building's central
227 energy management system or utility monitoring dashboard.
- 228 2. A biocide shall be used to treat the cooling system recirculation to minimize
229 the growth of Legionella and other microorganisms and to increase water
230 use efficiency.
- 231 3. Commercial and multifamily facilities constructed after September 5, 2017,
232 with an evaporative cooling tower system with a combined cooling capacity
233 equal to or greater than 100 tons, shall have a minimum of 10 percent of the
234 cooling tower make-up water offset with reclaimed or onsite water reuse.

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

236 **PASSED AND APPROVED**

238 §
239 §
240 _____, 2025 § _____
241 Kirk Watson
242 Mayor

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245 **APPROVED:** _____
246 Deborah Thomas
247 Interim City Attorney

245 **ATTEST:** _____
246 Myrna Rios
247 City Clerk