

Editor’s Note: This document contains those amendments adopted by the City of Oklahoma City and the State of Oklahoma regarding the 2018 International Mechanical Code (IMC). Those sections shown in **RED** designate State amendments adopted by the Oklahoma Uniform Building Code Commission. Any questions regarding the intent or interpretation of said State amendments should be referred to the OUBCC.

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AMENDMENTS

2018 INTERNATIONAL MECHANICAL CODE®

CHAPTER 1. SCOPE AND ADMINISTRATION

Section 101.1 is deleted in favor of Chapter 29, Section 29-1 of the Oklahoma City Municipal Code, 2020.

Section 101.3 is deleted in favor of Chapter 29, Sections 29-2 of the Oklahoma City Municipal Code, 2020.

Sections 103.1 and 103.2 are deleted in favor of Chapter 29, Sections 29-21 and 29-22 of the Oklahoma City Municipal Code, 2020.

Section 104.1 is deleted in favor of Chapter 29, Section 29-23 of the Oklahoma City Municipal Code, 2020.

Section 104.2 is deleted in favor of Chapter 29, Sections 29-35 through 29-47 of the Oklahoma City Municipal Code, 2020.

Section 104.3 is deleted in favor of Chapter 29, Section 29-26 of the Oklahoma City Municipal Code, 2020.

Section 104.4 is amended to add the following sentence:

The building official shall comply with the procedures and conditions set forth in the Oklahoma City Municipal Code prior to entry.

Section 104.5 is deleted in favor of Chapter 29, Section 29-29 of the Oklahoma City Municipal Code, 2020.

Section 104.6 is deleted in favor of Chapter 29, Section 29-24 of the Oklahoma City Municipal Code, 2020.

Section 104.7 is deleted in favor of Chapter 29, Section 29-30 of the Oklahoma City Municipal Code, 2020.

Section 106.1 is deleted in favor of Chapter 29, Section 29-36 of the Oklahoma City Municipal Code, 2020.

Section 106.3 is deleted in favor of Chapter 29, Sections 29-35, 29-39, 29-40, 29-41, 29-42, 29-43, 29-44, 29-46 and 29-47 of the Oklahoma City Municipal Code, 2020.

Section 106.4 is deleted in favor of Chapter 29, Sections 29-35, 29-39, 29-40, 29-41, 29-42, 29-43, 29-44, 29-46 and 29-47 of the Oklahoma City Municipal Code, 2020.

Sections 106.5 and 106.5.1 through 106.5.3 are deleted in favor of Chapter 29, Sections 29-35 - 29-67 of the Oklahoma City Municipal Code, 2020.

Section 107.2 is amended to add numbers 4 and 5 to read as follows:

- 4. The code official shall issue a certificate of approval at the completion of the work for which a permit has been issued, including construction gas/construction heat, where a building is under construction. If, after all inspections, it is found that such work complies with the provisions of this code and all other requirements of law or ordinances applicable to it, a duplicate of each piping certificate shall be delivered or transmitted to the gas company and used as their authority to establish gas service.
- 5. Fire damaged, remodeled, relocated buildings and/or meter relocations: Any building that has been fire damaged, remodeled, relocated, or where a gas meter is moved, or where a building has been without gas service for 12 months or longer, an inspection and a pressure test as required by this Code shall be performed on all gas piping and appliances before service is restored.

Section 107.7 is added to read as follows:

107.7 Construction heat. Construction heat shall be allowed in accordance with the following requirements:

- 1. An inspection shall be made for construction heat prior to placing the heating system in operation.
- 2. Filter or filters shall be installed over each return duct opening. Filters shall be replaced as they become loaded with dust and debris. Air-handling units, appliances, and equipment shall not be in operation while the air filters are being changed.
- 3. The construction heat thermostat shall have a minimum set point of 55 degrees F.
- 4. Mechanical equipment and appliances shall be installed in accordance with all safety requirements and limitations of the appliance and equipment manufacturer's installation

instructions, relative to construction heat.

5. When combustible, flammable, explosive or corrosive materials in any state (solid, liquid, or gaseous) are being used in the construction process the mechanical system shall not be in use. The construction area shall be thoroughly ventilated before the mechanical system is put back into service.
6. Failure to provide adequate filtering during construction shall require that all affected ductwork, mechanical equipment, and appliances be professionally cleaned or replaced before final approval.

Section 107.8 is added to read as follows:

107.8 Inspection access. It shall be the responsibility of the mechanical contractor, building owner, or the building owner's agent to provide access to all mechanical equipment and appliances to the code official for all required inspections. Where equipment and appliances are located in remote locations or at different floor or roof levels the contractor shall provide an approved ladder for inspection access. Where a pull-down ladder is provided, the ladder shall be installed with the top step facing in the direction of the access passageway, and toward the highest side of the roof decking. It shall also be the responsibility of the mechanical contractor to coordinate all required inspections with the property owner or the property owner's agent and the Code Official.

Section 108.2 is deleted in favor of Section 29-24 of the Oklahoma City Municipal Code, 2020.

Sections 108.3 and 108.4 are deleted in favor of Chapter 29, Section 29-25 of the Oklahoma City Municipal Code, 2020.

Section 108.5 is hereby amended to read as follows:

108.5 Stop work orders. Upon notice from the Chief Mechanical Inspector or his assistant that mechanical work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Notice of such occurrence, condition, or violation shall be in writing and shall be given to the owner of the property, the owner's agent, or to the person doing such work. A copy of the stop work order shall also be posted at the jobsite and shall not be removed without the consent of the code official upon completion of remedial action. The notice shall state the conditions that must be met for work to be authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with such written notice or a stop work order, except such work as that person is directed to perform by the Chief Mechanical Inspector or assistant, to remove a violation or unsafe condition, shall be subject to penalty as prescribed in Section 29-25 of the Oklahoma City Mechanical Code.

Section 109 is deleted in favor of Chapter 29, Sections 29-96 through 29-124 of the Oklahoma City Municipal Code, 2020.

CHAPTER 3. GENERAL REGULATIONS

Section 301.15 is amended to read as follows:

301.15 Wind resistance. Mechanical equipment, appliances and supports that are exposed to wind shall be designed and installed to resist the wind pressures determined in accordance with the International Building Code®, SMACNA HVAC Duct Construction Standards - Metal and Flexible, and other approved methods.

Section 303.4 is amended to add subsection 303.4.1 to read as follows:

303.4.1 Construction equipment. Construction equipment such as backhoes, other motorized earth moving equipment, etc., or sand-moving extensions of such equipment shall not travel within or over a stem wall area or foundation perimeter after plumbing, electrical or mechanical ducts, piping, equipment or materials have been installed.

Exception: Construction equipment shall be permitted within said prohibited areas where such equipment does not travel over or adjacent to any duct, piping, equipment, or materials subjecting them to physical damage, provided however that the code official shall be notified prior to the work and provided that the code official shall verify that no damage is done to the installation.

Section 304.3 is amended to add subsection 304.3.2 to read as follows:

304.3.2 Hazardous location installation.

- 1. Fuel burning central heating units shall be installed in accordance with Sections M303 and M304 of the International Mechanical Code, 2018 Edition, except that no fuel burning central heating units shall be installed under a stairwell.

Exception: This requirement shall not apply to areas under stairwells that are sprinkler protected.

- 2. Appliances such as central heating units shall be installed in accordance with Sections M303 and M304 of the International Mechanical Code, 2018 Edition. Fuel-burning central heating units and fuel-burning water heaters installed in a garage or other hazardous location shall be protected by enclosing in a closet and comply with Section FG304.6, "Outdoor Combustion Air" of the International Fuel Gas Code, 2018 Edition. Where combustion air is taken from a hazardous location, no portion of a combustion air opening shall be located within 24 inches of the floor.
- 3. Gas combustion type appliances and equipment installed in rooms or closets with doors which open to a garage or other hazardous location shall be installed in accordance with Sections M303 and M304 of this Code and the combustion air for such equipment shall be provided from an outdoor source unless otherwise approved.

Section [BE] 304.11 is amended to read as follows:

[BE] 304.11 Guards. Guards shall be provided where various components that require service located on a roof or elevated structure and have a condition as set forth in Sections 304.11.1 through 304.11.3. The top of the guard shall be located not less than 42 inches (1067 mm) above the elevated surface adjacent to the guard. The guard shall be constructed so as to prevent the passage of a 21-inch diameter (533 mm) sphere and shall comply with the loading requirements for guards as specified in the International Building Code®. Guards shall be provided at new components when added or replaced on an existing roof or elevated structure and have a condition as set forth in Sections 304.11.1 through 304.11.3.

Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of walking surfaces.

Section 304.11.1 is added to read as follows:

304.11.1 Roof edge. Guards complying with 304.11 shall be provided when components are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface or elevated structure and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the component that requires service.

Section 304.11.2 is added to read as follows:

304.11.2 Skylights. Guards complying with Section 304.11 shall be provided when a skylight is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the skylight.

Exceptions:

1. Guards are not required when the skylight is located at least 42 inches (1067 mm) above the highest point of the walking surface adjacent to the skylight or component.
2. Guards are not required if some other provision for skylight fall-through protection is provided and approved by the authority having jurisdiction.

Section 304.11.3 is added to read as follows:

304.11.3 Roof hatch. Guards complying with Section 304.11 shall be provided when a roof hatch is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the roof hatch. If the component is within 10 feet (3048 mm) of the ladder access side of the roof hatch, the guard shall incorporate a self-closing, self-latching gate. The gate shall have a top edge of not less than 42 inches (1067 mm) above the elevated surface adjacent to the gate and shall not allow the passage of a 21 inch (533 mm) sphere. If a roof hatch exists within 10 feet of a roof edge that is located more than 30 inches (762 mm) above the floor, roof or grade below and a new component that requires service on that existing roof or elevated structure, then a guard complying with Section 304.11 shall be added between the existing roof hatch and the roof edge.

Section 305.1.1 is added to read as follows:

305.5.1 Location and protection of refrigerant piping. Refrigerant piping installed within 1 1/2 inches (38 mm) of the underside of roof decks shall be protected from damage caused by nails and other fasteners.

Section 306.5 is added to read as follows:

306.5 Equipment and appliances on roofs or elevated structures. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access such equipment or appliances, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

1. Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

- a. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
 - b. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center. The upper-most rung shall be not more than 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.
 - c. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
 - d. There shall be not less than 18 inches (457 mm) between rails.
 - e. Rungs shall have a diameter not less than 0.75-inch (19 mm) and be capable of withstanding a 300-pound (136.1 kg) load.
 - f. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488.2 kg divided by meters squared). Landing dimensions shall be not less than 18 inches (457 mm) and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.
 - g. Climbing clearance. The distance from the centerline of rungs to the nearest permanent object on the climbing side of the ladder shall be not less than 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381 mm) shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs except where cages or wells are installed.
 - h. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches (762 mm) by 30 inches (762 mm) centered in front of the ladder.
 - i. Ladders shall be protected against corrosion by approved means.
 - j. Access to ladders shall be provided at all times.
2. Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms. Exceptions:
 - a. This section shall not apply to Group R-3 occupancies.
 - b. This section shall not apply to appliance replacement.

Section 307.2.1 is amended to read as follows:

307.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Condensate drains shall be allowed to terminate to an approved pit or French drain consisting of a minimum of 24 inches by 24 inches by 24 inches (610 mm by 610 mm by 610 mm), or equivalent; of 1 inch (25 mm) washed rock. Such pits or French drains shall be located 30 inches (762 mm) minimum from outer edge of foundation to nearest edge of pit or French drain. Condensate shall not discharge into a street, alley or other areas so as to cause a nuisance.

Section 307.2.3.1 is amended to read as follows:

307.2.3.1 Water-level monitoring devices. On down-flow units and all other coils that do not have a secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the equipment served in the event that the primary drain becomes restricted. Devices installed in the drain line shall not be permitted.

Exception: This section shall not apply to appliances installed in areas outside on the ground or

elevated structure where condensate overflow will not damage building components or contents.

CHAPTER 5. EXHAUST SYSTEMS

Section 502.15 is amended to read as follows:

502.15 Repair garages. Where Class I liquids or LP-gas are stored or used within a building having a basement or pit wherein flammable vapors could accumulate, the basement or pit shall be provided with ventilation designed in accordance with Section 2311.4.3 of the International Fire Code® to prevent the accumulation of flammable vapors therein.

Section 506.3.1.1 is added to read as follows:

506.3.1.1 Grease duct materials. Grease ducts serving Type I hoods shall be constructed of non-galvanized carbon steel having a minimum thickness of 0.0575 inch (1.463 mm) (No. 16 gage) or stainless steel not less than 0.0450 inch (1.14 mm) (No. 18 gage) in thickness.

Exception: Factory-built commercial kitchen grease ducts listed and labeled in accordance with UL 1978 and installed in accordance with Section 304.1.

Section 507.2 is amended to read as follows:

507.2 Type I hoods. Type I hoods shall be installed where cooking appliances produce grease or smoke as a result of the cooking process. Type I hoods shall be installed over medium-duty, heavy-duty, and extra-heavy-duty cooking appliances.

Exceptions:

1. A Type I hood shall not be required for an electric cooking appliance where an approved testing agency provides documentation that the appliance effluent contains 5 mg per cubic meter when tested at an exhaust flow rate of 500 cfm (0.236 cubic meters per second) in accordance with UL 710B.
2. Where approved, a Type II hood equipped with a suppression system listed in accordance with UL 300A, or meeting the requirements of ICC-ES LC 1031, shall be permitted in new construction and renovation of adult day care facilities or child day care facilities having an occupant load of 16 or less, with a single domestic Medium Duty Cooking Appliance, utilized for warming food only.

Section 507.2.6 is amended to read as follows:

Section 507.2.6 Clearances for Type I hood. A type I hood shall be installed with a clearance to combustibles of not less than 18 inches (457 mm).

Exceptions:

1. Clearance shall not be required from gypsum wallboard to ½-inch (12.7 mm) or thicker cementitious wallboard attached to both sides of noncombustible structures provided that a smooth, cleanable, nonabsorbent, and noncombustible material is installed between the hood and the gypsum or cementitious wallboard over an area extending no less than 18 inches (457 mm) in all directions from the hood. Stud cavities within wall structures shall not contain combustible materials.
2. Type I hoods listed and labeled for clearances less than 18 inches (457 mm) in accordance with UL 710 shall be installed with the clearances specified by such listings.

CHAPTER 6. DUCT SYSTEMS

Section 604.1 is amended to read as follows:

604.1 General. Duct insulation shall conform to the requirements of Sections 604.2 through 604.13, the 2009 International Energy Conservation Code and SMACNA HVAC Duct Construction Standards – Metal and Flexible.

CHAPTER 8. CHIMNEYS AND VENTS

Section 805 is amended to read as follows:

805.1 Listing. Factory-built chimneys shall be listed and labeled and shall be installed and terminated in accordance with the manufacturer's installation instructions.

805.2 Solid fuel appliances. Factory-built chimneys installed in dwelling units with solid fuel-burning appliances shall comply with the Type HT requirements of UL 103 and shall be marked "Type HT" and "Residential Type and Building Heating Appliance Chimney".

Exception: Chimneys for use with open combustion chamber fireplaces shall comply with the requirements of UL 103 and shall be marked "Residential Type and Building Heating Appliance Chimney".

Chimneys for use with open combustion chamber appliances installed in buildings other than dwelling units shall comply with the requirements of UL 103 and shall be marked "Building Heating Appliance Chimney" or "Residential Type and Building Heating Appliance Chimney".

805.3 Factory-built fireplaces. Chimneys for use with factory-built fireplaces shall comply with the requirements of UL 127.

805.4 Factory-built chimney offsets. Where a factory-built chimney assembly incorporates offsets, no part of the chimney shall be at an angle of more than 30 degrees (0.52 rad) from vertical at any point in the assembly and the chimney assembly shall not include more than four elbows.

805.4 Support. Where factory-built chimneys are supported by structural members, such as joists and rafters, such members shall be designed to support the additional load.

805.5 Medium-heat appliances. Factory-built chimneys for medium-heat appliances producing flue gases having a temperature above 1,000°F (538°C) measured at the entrance to the chimney shall comply with UL 959.

805.6 Decorative shrouds. Decorative shrouds shall not be installed at the termination of factory-built chimneys except where such shrouds are listed and labeled for use with the specific factory-built chimney system and are installed in accordance with Section 304.1.

805.7 Insulation shield. Where factory-built chimneys pass through insulated assemblies, an insulation shield constructed of steel having a thickness of not less than 0.0187 inch (0.4712 mm) (No. 26 gage) shall be installed to provide clearance between the chimney and the insulation material. The clearance shall be not less than the clearance to combustibles specified by the chimney manufacturer's installation instructions. Where chimneys pass through attic space, the shield shall terminate not less than 2 inches (51 mm) above the insulation materials and shall be secured in place to prevent displacement. Insulation shields provided as part of a listed chimney

system shall be installed in accordance with the manufacturer's instructions.

CHAPTER 14. SOLAR THERMAL SYSTEMS

Section 1402.8.3 is amended to read as follows:

1402.8.3 Piping. Potable piping shall be installed in accordance with the International Plumbing Code®. Hydronic piping shall be installed in accordance with Chapter 12 of this code. Mechanical system piping shall be supported in accordance with Section 305.

CHAPTER 15. REFERENCED STANDARDS

UL 300A 2006 edition, Outline of Investigation for Extinguishing System Units for Residential Range Top Cooking Surfaces has been added to read: **300A-06 Outline of Investigation for Extinguishing System Units for Residential Range Top Cooking Surfaces: 507.2.**

EFFECTIVE this ___1st___ day of ___March___ 2024.