AUSTIN FIRE DEPARTMENT

2024 International Fire Code Adoption

2024 International Fire Code

Local Amendment Adoption

The Our Mission Goes Beyond Our Name is the cornerstone of the Austin Fire Department. A leader in the fire service, AFD is on the cutting-edge of technology and training. A leader in the fire service, the Austin Fire Department protects lives and property through extensive fire prevention and safety education efforts, in addition to a quick and effective response to emergencies.

Proposed Adoption

In accordance with ICC latest publication, Austin Fire Department is on track to implement the 2024 International Fire Code (IFC) on **January 1, 2025.**

Coordinate and Clarify

Goal: To clarify previously adopted local amendments with changing technology and published code and coordinate changed or outdate references to other adopted codes and standards.

Reasons for amendments:

1. To support operating procedures for Operations, both in and outside of structures
2. Clarification purposes
3. Provide higher level of safety for properties utilizing hazardous materials

2024 IFC Significant Changes

- **Chapter 2 § 202 Definitions**

  - Flammable Gas Definition - A material which is a gas at 68°F or less at 14.7 psia subdivided as follows:
  - 1. Category 1A. A gas that meets either of the following:
    - 1.1. A gas which is ignitable at 14.7 psia when in a mixture of 13% or less by volume with air; or
    - 1.2. A gas with a flammable range at 14.7 psia with air of not less than 12%, regardless of the lower limit, unless data shows compliance with Category 1B.
  - 2. Category 1B. A gas which meets the flammability criteria for Category 1A, is not pyrophoric or chemically unstable, and meets one of more of the following:
    - 2.1. A lower flammability limit of more than 6% by volume of air; or
    - 2.2. A fundamental burning velocity of less than 3.9 inches/second.
  - The limits specified shall be determined at 14.7 psi and a temperature of 68°F in accordance with ASTM E681. Where not otherwise specified, the term “flammable gas” includes both Category 1A and 1B.

  - Occupiable Roof – an exterior space on a roof that is designed for human occupancy, other than maintenance and repair, and which is equipped with a means of egress system meeting requirements of this code.
    - **Not** considered a floor
    - Does **not** change building height
    - Must meet all egress requirements applicable to occupancy classification, as well as accessibility requirements
    - Elevator required if 4 stories or more (3rd floor above Level of Exit Discharge)

2024 IFC Significant Changes

- **Chapter 3 § 320 – Storage of Lithium Batteries**
    - Permit required for lithium battery storage ≥15 ft^3
    - Fire safety and evacuation plan required
    - 3 storage configuration options
        - A single facility my use more than one storage configuration
            - 1. Containers
            - 2. Indoor storage room
            - 3. Outdoor storage room.
    - In mixed-use buildings, the battery storage area shall be separated from the remainder by 2-HR fire barriers
    - Technical opinion and report to evaluate the fire and explosion risks associated with the indoor storage of lithium-ion and lithium metal batteries and evaluate.
    - Where the state of charge is demonstrated to be ≤30% for lithium-ion or lithium metal batteries, the following protection features are not required:
        - Technical opinion and report
        - Separation with 2-HR construction
        - Explosion control

2024 IFC Significant Changes

- **Chapter 9 § 903.2 – Where Required, exceptions**
    - Batteries for telecommunications equipment are no longer exempt from fire sprinkler requirements
    - **IF** §1207 requires fire sprinklers for the ESS system, then fire sprinklers must be installed, and the exception does not apply
- **Chapter 9 § 903.2.2 – Group B**
    - **§ 903.2.2.2 Laboratories involving research and development or testing.** An automatic sprinkler system shall be installed through out the fire areas utilized for the research and development or testing of lithium-ion or lithium metal batteries.
- **Chapter 9 § 903.2.4 – Group F-1**
    - 4. A Group F-1 occupancy is used to manufacture lithium-ion or lithium metal batteries.
    - 5. AGroupF-1occupancyisusedtomanufacturevehicles,energystoragesystems or equipment containing lithium-ion or lithium metal batteries where the batteries are installed as part of the manufacturing process.
- **Chapter 9 § 903.2.7 – Group M**
    - **§ 903.2.7.3 Lithium-ion or lithium metal battery storage.** An automatic sprinkler system shall be provided in a room or space within a Group M occupancy where required for the storage of lithium-ion or lithium metal batteries by Section 320 or Chapter 32.

2024 IFC Significant Changes

- **Chapter 9 § 905 Standpipe Systems**
  - **905.3** – Required Installations
    - New exemption is R-2 townhouses
    - Currently not requiring in these
  - **905.3.4 – Stages –** section removed. Standpipes at stages no longer required
  - **905.4 – Location of Class I Standpipe Hose connections**
    - Now required at *exterior exit stairways* in addition to interior exit stairways
- **Chapter 9 § 907 Fire Alarm and Detection Systems**
  - **907.2.2.2 –Laboratories involving research and development or testing (B Occupancy)**
    - Fire alarm system activated by air-sampling smoke detection or radiant energy sensing detection installed throughout entire fire area utilized for research and development or testing of lithium-ion or lithium metal batteries.
  - **907.2.4.1 – Manufacturing involving lithium-ion or lithium metal batteries (F Occupancy)**
    - Similar requirement for Labs.
    - Includes manufacturer of vehicles, ESS or equipment containing lithium-ion or lithium metal batteries.
  - **907.2.7.2 – Storage of lithium-ion or lithium metal batteries (M Occupancy)**
    - Similar requirement as Labs
    - Limits to room or space where stored in accordance with §320
  - **907.2.10.2 – Storage of lithium-ion or lithium metal batteries (S Occupancy)**
    - Similar requirement as Labs
    - Fire area where stored in accordance with §320

2024 IFC Significant Changes

- **Chapter 9 § 915 Carbon Monoxide (CO) Detection**
  - **§ 915.1 – General**
    - Now required in all buildings except unoccupied Group F, Group S and Group U

  - **§ 915.1.1 – Where Required**
    - In buildings containing CO source
    - In buildings containing or being supplied by a CO-producing forced-air furnace.
    - In buildings with attached private garages.
    - In buildings that have CO-producing vehicle that is used within the building.

  - **§ 9152 – Locations**
    - **§ 915.2.3 – Group E occupancies** - revised to be located throughout, not just classrooms.
    - **§ 915.2.4 – CO-Producing Forced-air Furnace –** installed in all enclosed rooms and spaced served by furnace
      - Not required where CO detector provided in first room or space served by each main duct
      - Not required in dwelling units complying with §915.2.1.
    - **§ 915.2.5 – Private Garages** - installed within enclosed occupiable rooms or spaces contiguous to private garage
      - Not required in buildings w/o contiguous openings between garage and building
      - Not required in rooms or spaces located more than one story above or below garage
      - Open parking garage (IBC § 406.5) or enclosed parking garage (IBC § 406.6) not a private garage
      - Where private garage connects to building via open-ended corridor.
      - Not required in dwelling units complying with §915.2.1

2024 IFC Significant Changes

- **Chapter 9 § 915 Carbon Monoxide (CO) Detection**
  - **§ 915.2 – Locations**
    - **§ 915.2.6 – All other locations** – installed on ceiling of enclosed rooms or spaces containing CO producing devices or served by CO furnaces.
    - Exception where environmental conditions prohibit installation within space, detector to be placed in approved contiguous space.

  - **§ 915.2 – Detection**
    - **§ 915.3.1 – Alarm limitations –** CO alarms shall be installed in dwelling units and sleeping rooms only. Not installed where code requires CO detectors.
    - **§ 915.3.2 – FA System Required** - New buildings required to have FA system shall have CO detectors connected to system.
    - **§915.3.3 – FA System Not Required** - New buildings not required to have FA system shall have CO detectors installed by:
      - CO detectors connected to approved CO detection system per NFPA 72
      - CO detectors connected to approved combination system per NFPA 72
      - CO detectors connected to approved FA system per NFPA 72
      - Where approved by FCO, CO alarms maintained in accordance with manufacturer's instructions
    - **§915.3.4 – Installation** – Installed in accordance with NFPA 72 and manufacturer's instructions.

2024 IFC Significant Changes

- **Chapter 9 § 915 Carbon Monoxide (CO) Detection**
  - **§ 915.4 – CO Alarms**
    - **§ 915.4.4 – Interconnection**– Where one or more alarms required, CO alarms to be interconnected such that activation of one causes activation of all alarms.

  - **§ 915.5 – CO detection systems**
    - **§ 915.5.4 – Occupant notification –** Activation of detector shall annunciate at the control unit and initiate audible and visual alarm notification throughout building
      - Notification permitted to be limited to area of origin in accordance with approved fire safety plan.
    - **§ 915.5.5 – Duct Detection** – CO detectors in ductwork or plenums not a substitute for required protection.

- **Chapter 9 § 917 Mass Notification**
  - **§ 917.2 – Group E Occupancies** – Prior to new construction with occupant load greater than 500, mass notification risk analysis per NFPA 72 is required. When determined, MNS shall be provided in accordance with findings of risk analysis.

2024 IFC Significant Changes

- **Chapter 27 Semiconductor Fabrication Facilities**
  - **Table 2704.2.2.1– Limits for HazMat in Single Fabrication Facility**
    - Increased to allow more production and efficiency.
    - Max quantity at a single workstation remains the same.

TABLE 2704.2.2.1 *(excerpts)*
QUANTITY LIMITS FOR HAZARDOUS MATERIALS IN A SINGLE FABRICATION AREA IN GROUP H-5 [a]

HAZARD CATEGORY	SOLIDS (pounds/ft²)	LIQUIDS (gallons/ft²)	GAS (ft³ @ NTP/square foot)
PHYSICAL-HAZARD MATERIALS			
Combustible liquid Class II Class IIIA Combination Class I, II and IIIA	Not Applicable	~~0.01~~ 0.02 ~~0.02~~ 0.04 ~~0.04~~ 0.08	Not Applicable
Flammable liquid Class IA Class IB Class IC Combination Class IA, IB and IC Combination Class I, II and IIIA	Not Applicable	~~0.0025~~ 0.005 ~~0.025~~ 0.05 ~~0.025~~ 0.05 ~~0.025~~ 0.05 ~~0.04~~ 0.08	Not Applicable
Organic peroxide Unclassified detonable Class I Class II Class III	Note b Note b ~~0.025~~ 0.05 ~~0.1~~ 0.2	~~Not Applicable~~ Note b Note b 0.0025 0.02	Not Applicable

2024 IFC Significant Changes

- **Chapter 33 – Safeguards for Construction**
  - **§ 3312.1 –Additional safeguards for Type IV Construction**
    - When Type IVA or IVB construction reaches 6 stories, the 2021 IFC requires a single layer of noncombustible protection to be installed on all exposed wood surfaces up to 4 stories below the top floor under construction
      - In other words, never more than 4 stories of unprotected wood during the construction
    - 2024 IFC exempts the floor from this

2024 IFC Significant Changes

- **Chapter 50 – Hazardous Materials – General Provisions**
  - **Table 5003.1.1(5) – Hazardous Materials Exemptions**
  - **Locally amended to remove Corrosive Building Materials, Explosives storage of industrial explosive devices, Flammable and combustible liquids and gases –Alcoholic beverages in distilling and Fuel Oil, and Any Agricultural Materials**

MATERIAL CLASSIFICATION	OCCUPANCY OR APPLICATION	EXEMPTION
Combustible fiber	Baled Cotton	Densely packed baled cotton shall not be classified as combustible fiber, provided the bales comply with the packing requirements of ISO 8115
Corrosive	Personal and household products	The quantity of personal and household products that are classified as corrosive materials is not limited in retail displays, provided that the products are in the original packaging.
	Retail and wholesale sales occupancies	The quantity of medicines, foodstuffs or consumer products and cosmetics containing not more that 50 percent by volume of water-miscible liquids, with the remainder of the solutions not being flammable, is not limited To qualify for this allowance, such materials shall be packaged in individual containers not exceeding 1.3 gallons.
Explosives	Group M and R-3	Storage of black powder, smokeless propellant and small arms primers is not limited
Flammable and combustible liquids and gases	Aerosols	Buildings and structures occupied for the storage of aerosol products, aerosol cooking spray products, or plastic aerosol 3 products shall be classified as Group S-1
	Alcoholic beverages	The quantity of alcoholic beverages in liquor stores and distributors without bulk storage is not limited
		The quantity of alcoholic beverages in brewing is not limited.
		The storage quantity of beer, distilled spirits and wines in barrels and asks is not limited.
		Alcoholic beverages in retail and wholesale occupancies is not limited. To qualify for this allowance, beverages must be packaged in individual containers not exceeding 1.3 gallons
	Cleaning establishments with combustible liquid solvents	The quantity of combustible liquid solvents used in closed systems and having a flash point at or above 140 Fis not limited. To qualify for this allowance, equipment shall be listed by an approved testing agency and the occupancy shall be separated from all other areas of the building by 1-hour fire barriers or 1-hour horizontal assemblies, or both, constructed in accordance with the *International Building Code*.
		The quantity of combustible liquid solvents having a flash point at or above 200 F is not limited.
	Closed piping systems	The quantity of flammable and combustible liquids and gases utilized for the operation of machinery or equipment is not limited.
	Flammable finishing operations using flammable and combustible liquids	Building and structured occupied for the application of flammable finishes shall comply with Section 416.
	Fuel	The quantity of liquid or gaseous fuel in fuel tanks of vehicles or motorized equipment is not limited.
		The quantity of gaseous fuels in piping systems and fixed appliance regulated by the *International Fuel Gas Code* is not limited.
		The quantity of liquid fuels in piping systems and fixed appliances regulated by the International Mechanical Code is not limited.
	Hand Sanitizer	The quantity of alcohol-based hand rubs (ABHR) classified as Class I or II liquids in dispensers installed in accordance with Section 5705.5 and 5705.5.1 is not limited. The location of the ABHR shall be provided in the construction documents.
	Retail and wholesale occupancies with flammable and combustible liquids	The quantity of medicines, foodstuffs or consumer products, and cosmetics containing not more than 50 percent by volume of water-miscible liquids, with the remainder of the solutions not being flammable, is not limited. To qualify for this allowance, such materials shall be packaged in individual containers not exceeding 1.3 gallons.
Highly toxic and toxic materials	Retail and wholesale occupancies	The quantity of medicines, foodstuffs or consumer products, and cosmetics containing not more than 50 percent by volume of water-miscible liquids, with the remainder of the solutions not being flammable, is not limited. To qualify for this allowance, such materials shall be packaged in individual containers not exceeding 1.3 gallons.
	Energy Storage	The quantity of hazardous materials in stationary storage battery systems is not limited.
		The quantity of hazardous materials in stationary fuel cell power systems is not limited.
		The quantity of hazardous materials in capacity energy storage systems is not limited.
	Refrigeration systems	The quantity of refrigerants in refrigeration systems is not limited.

2024 IFC Significant Changes

- **Chapter 50 – Hazardous Materials – General Provisions**
  - **Table 5003.11.2 – Max Allowable Quantity of Low Burning Velocity 1B**

TABLE 5003.11.2
MAXIMUM ALLOWABLE QUANTITY OF LOW BURNING VELOCITY CATEGORY 1B FLAMMABLE GAS IN GROUP M AND S OCCUPANCIES PER CONTROL AREA[a]

CATEGORY 1B (Low BV)[d]	SPRINKLERED IN ACCORDANCE WITH NOTE B	NONSPRINKLERED
Gaseous	39,000 ft^3	195,000 ft^3
Liquified	40,000 lb[c]	20,000 lb

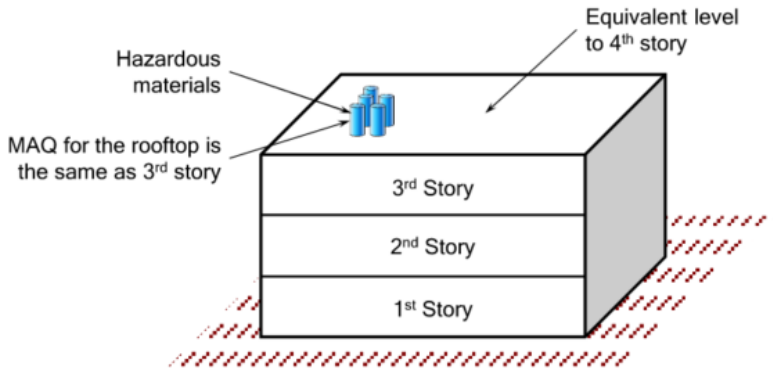
For SI: 1 pound = 0.454 kg, 1 cubic foot = 0.028 m^3.

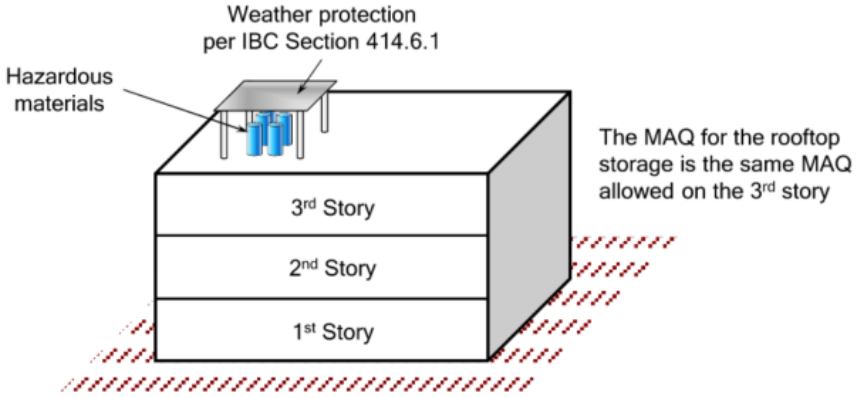
a. Control areas shall be separated from each other by not less than a 1-hour fire barrier.
b. The building shall be equipped throughout with an approved automatic sprinkler system with a minimum sprinkler design density of Ordinary Hazard Group 2 in the area where flammable gases are stored or displayed.
c. Where storage areas exceed 50,000 square feet in area, the maximum allowable quantities area is allowed to be increased by 2 percent for each 1,000 square feet of area in excess of 50,000 square feet, up to not more than 100 percent of the table amounts. Separation of control areas is not required. The aggregate amount shall not exceed 80,000 pounds.
d. "Low BV" Category 1B flammable gas has a burning velocity of 3.9 in/s (10 cm/s) or less.

  - **§5003.11.2.1 – Fire Protection and Storage Arrangements**
    - Storage
      - Separate ≥20’ from flammable liquids
      - Separate ≥10’ from flammable liquids if secondary containment or diking is provided
        - Edge of secondary containment or diking ≥10’ from Category 1B flammable gas
      - Shelf storage ≥6’ in height
    - Fire Protection
      - Rack storage, palletized storage or solid piles ≥6’ in height shall be sprinklered
      - Sprinklers designed for Extra Hazard Group 1
      - Shelf storage shall be on metal shelves
      - Combustible commodities shall not be stored above

2024 IFC Significant Changes

- **Chapter 50 – Hazardous Materials – General Provisions**
  - **§ 5003.13 – Outdoor Rooftop Storage, Use and Handling**
    - Storage on roofs or on top of canopies is considered rooftop storage
    - Rooftop storage quantities shall NOT be included in the MAQ for the building
    - Rooftop storage does NOT create another story
    - Quantity in rooftop storage shall not exceed the MAQ for the story below





Chapter 25-12: Local Amendments to the International Fire Code

Chapter 1

AFD is reverting to model code for requirements of §106 Construction Documents

- §106.2 Examination of Documents
- §106.2.1 Information on Construction Documents
- §106.2.4 Approved Documents

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 2

AFD is adding definitions to correlate to Animal Care Facility Fire Protection Requirements

[B] ANIMAL HOUSING OR CARE FACILITY. A facility used for twenty-four (24) hour occupancy or permanent housing of animals for the purpose of providing a service, participating in a sport, or for providing general board and care. Animal housing or care facilities include animal shelters, animal breeding facilities, animal grooming facilities, animal daycare facilities, pet resorts, animal hospitals/veterinary clinics, kennels and pounds. Animal housing or care facilities do not include animal or pet care by pet owners for their own animals at their owned or rented residential property, and these facilities do not include Group U agricultural uses for the care and feeding of the agricultural business owner's own livestock.

[B] CONSTANT SUPERVISION FOR GROUP B ANIMAL HOUSING OR CARE FACILITY. Twenty-four (24) hour on-site staff capable or responding to problems or emergencies that could impact the safety or lives of the animals being housed or cared for.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 2

AFD is adding definitions to correlate to Animal Care Facility Fire Protection Requirements

§ 203 Occupancy Classification and Use

[BG] GROUP B BUSINESS. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including the storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

~~Animal hospitals, kennels and pounds~~ Animal housing or care facilities

*All other examples remain unchanged

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 2

§ 203 Occupancy Classification and Use

- Following IBC, local amendments for I-1, I-2, I-4, E and R not moving forward and reverting to model code for occupant threshold (amendment was six (6), model code is five (5).

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 3

§324 - Illumination required by a tertiary power system. A tertiary power system shall be provided to automatically illuminate the following areas in the event of primary and secondary power failure:

1. Electrical equipment rooms.
2. Fire command centers.
3. Fire pump rooms.
4. Generator rooms.
5. Elevator machine rooms.

Duration and lighting levels shall be as required by IBC sections 1008.3.1 and 1008.3.2.
Exception: Generator rooms shall required 3 footcandles (33 lux) as required by NFPA 110 section 7.3.3.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 5

§ 503.2.1 Dimensions. Exception 2 (d)

d. Throat widths entering a two way fire access road from a public street (level 1 or 2 street without center left turn lane) shall be allowed to be transitioned to 20’ at pedestrian crosswalk locations. The fire access road shall transistion back to 25’ within the lesser of the throat length to the plane of the first parking stall or crossing drive aisle or transition at a horizontal rate of 1 foot lateral for 15 feet of travel distance after entering the fire access road. Fire access driveways adjacent to zero lot line buildings shall optimize the regulated driveway width, radii and mountable curbs to facilitate apparatus navigation. Vertical and horizontal clearances of the apparatus undercarriage with the finished grades shall be profiled, modeled, evaluated and approved by the fire code official.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 5

§5**03.2.3.1 Alternative Surfaces.** Alternative surfaces shall be allowed when the installation and materials used comply with the requirements as set forth in the Fire Protection Criteria Manual. The design engineer of record shall make periodic construction observations and upon substantial competition of the work, the design engineer shall provide the fire code official an engineer's letter of concurrence that the work and materials were installed in substantial conformance with the record document.

1. Alternative surfaces shall be a slip resistance surface in locations that require turning movements and a minimum of 40 linear feet located at building corners for aerial operations. A fire apparatus shall be able to access the scrub areas for both building faces from the slip resistant surface located at the building corner or apex of curvature.
2. Alternative surfaces shall not be utilized as the only fire access to a building. Alternative surfaces shall be limited to a maximum of 30% of the fire protection along the building perimeter. Hose lay distances from the apparatus located on an alternative surface shall be included with the 30% maximum limit for the calculation of fire protection along the building perimeter.
3. Alternative surface fire lanes install without a type 1 or 2 driveway appron shall utilize at a minimum a reinforced mountable curb. The face and top of the curb shall be designated fire lane with stripping and signage for the width of the fire lane and the length of curb to prohibit parked cars within the turning movements from the lane of travel.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 901.6 Fire Protection System Maintenance Standards and Table 901.6
§ 903.2.8.1.1 Group R-1 Bed and Breakfast occupancies
§ 903.3.1.2.1 Balconies and decks
§ 903.3.5.4 Hose Stream Demand

- Removing local amendment, following model Code.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

903.2.2.3 Group B – Animal Housing or Care Facilities. An automatic sprinkler system in accordance with Section 903.3 and 903.4 shall be provided in fire areas containing an animal housing or care facility when the animals are not provided with constant supervision.

Exceptions:

- An automatic sprinkler system is not required in animal housing or care facilities serving 25 or fewer animals where all of the following conditions are met:
  - Walls and ceilings have a Class A finish as specified in Section 803
  - The facility is provided with a supervised fire alarm system in accordance with Section 907.2.2.2.
- An automatic sprinkler system is not required in animal housing or care facility serving 50 or fewer animals where all of the following conditions are met:
  - The facility is of one (1) hour fire resistive construction on both sides of the boundary walls of the kennel area.
  - Walls and ceilings have a Class A finish as specified in Section 803
  - The facility is provided with a supervised fire alarm system in accordance with Section 907.2.2.2.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 904.9 Halon Systems
§ 904.13 Domestic Cooking system facilities, in Group I-2 Condition 1
§ 905.1 General (standpipes)
§ 905.1.1 Hose (standpipes)

- Removing local amendment, following model Code.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 905.5.3 Class II system hose
§ 907.2 Where required, new buildings and structures (fire alarm)

- Removing local amendment, following model Code.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

907.2.2.3 Animal Housing or Care Facilities. Fire areas containing an animal housing or care facility shall be provided with an electronically supervised automatic smoke detection system. In spaces provided with a source of heat or light but otherwise unconditioned, in lieu of smoke detection the alarm system may be activated by quick response heat detectors with a response time index (RTI) of less than 100 (ie. RTI classification of "Quick", "Ultrafast", "V-fast").

Exception: Smoke detectors and/or quick response heat detectors are not required where the building is equipped with an automatic sprinkler system installed in accordance with Sections 903.3 and 903.4 and activation of the automatics sprinkler system activates notification appliances as required by Section 907.2.2.3.1.

907.2.2.3.1 Notification Appliances. Notification appliances shall provide audible and visual alarm signals in office areas and other areas within the fire area where no animals are house or cared for. Notification appliances within the areas animals are housed or cared for shall provide visual only notification.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 907.2.8.2 Automatic Smoke detection system
§ 907.2.9 Group R-2
§ 907.2.9.1 Manual and automatic fire alarm system
§ 907.5.2.1.1 Average sound pressure
§ 907.6.1 Wiring
§ 907.6.2.1 Protection of Fire Alarm Control Unit and Notification Power Supplies

- Removing local amendment, following model Code.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 909.12.4 Automatic Control
§ 909.18.8 Testing for Smoke Control
§ 909.20 Smokeproof Enclosures
§ 909.20.1 Access
§ 909.20.2.1 Door Closers
§ 909.20.2 Construction
§ 909.20.3 Pressurized Stair and Entrance Vestibule Systems
§ 909.20.3.4 Pressurization Systems

- Removing local amendment, following model Code.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 909.20 Smoke Barrier Construction

909.5 Smoke Barrier Construction

1. **Walls: A/Aw = 0.00035 (includes construction cracks, and cracks around windows and doors)**
2. **Interior exit stairways and ramps and exit passageways: A/Aw= 0.00035 (includes construction cracks but not cracks around windows or doors)**
3. **Elevator shaft walls, Enclosed exit access stairways and ramps and all other shafts: A/Aw= 0.0018 (includes construction cracks but not cracks around doors)**
4. **Floors and roofs: A/AF= 0.00017 (includes construction cracks and gaps around penetrations)**

- Updated language to be consistent with 2024 IFC

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 909.20 Smokeproof enclosures

AFD no longer carrying forward amendments for vestibules at pressurized stairs. Mostly reverting to model Code

909.2.4 Stairway and ramp pressurization alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section9 03.3.1.1,the vestibule is not required, provided that each interior exit stairway or ramp is pressurized to not less than 0.10 inch of water (25Pa) and not more than 0.35 inch of water (87Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

909.20.4.1 Pressurization system. Using fans with motor speeds controlled by variable-frequency drives, the stair shall be pressurized to accommodate two conditions:

1. **All stair doors closed**
2. **All stair doors closed plus all stair tower exterior ground floor level doors opened.**

Validation of the pressurization fan sizes shall include the analysis described in Fire Code Section 909.4 under both winter and summer conditions using the most recent ASHRAE climatic data tables for Austin, Texas. Sizing of pressurization fans shall be performed using computer modeling software as approved by the fire code official.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

909.20.4.2 Pressure difference. Under the two conditions listed in Section 909.20.4.1, the pressure difference across stair doors shall not exceed 30 pounds (133N) maximum force to begin opening the door.

909.20.4.3 Dampered relief opening. A relief vent sized at 5,000cfrm and an opening point of 0.35 inch of water (field adjustable shall be provided at the upper portion of the stair shaft.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 912.1 and §912.1.1 Installation and Number of Hose Connections
§ 912.4 Access
§ 912.4.1 Locking fire department connection caps

- Removing local amendment, following model Code.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

912.5 Signs. For new and existing structures, an all-weather, permanent sign shall be placed in a visible location adjacent to fire department connections serving automatic sprinklers, standpipes or fire pump connections. The text shall be white reflective letters on a red background. Such signs shall read: “FDC”, "AUTOMATIC SPRINKLERS,” “STANDPIPES,” “TEST CONNECTION,” “STANDPIPE AND AUTOSPKR” or “AUTOSPKR AND STANDPIPE,” or a combination thereof as applicable.

912.5.1 Lettering. Each fire department connection (FDC) shall be designated by a sign having the letters “FDC” not less than 6 inches (152 mm) in height and words in letters not less than 2 inches (51 mm) in height. For manual standpipe systems, the sign shall also indicate that the system is manual and that it is either wet or dry.

912.5.5 Indication of pressure reducing valves. Where pressure reducing valves are provided within the building, the sign shall indicate the range of floor levels.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

913.1.1 Fire Pump Rating. Fire pump(s) for fire protection shall be selected so that the greatest single demand for any fire protection system connected to the pump is less than or equal to 125 percent of the rated capacity (flow) of the pump.

913.2.2.1 Fire Pump Disconnect. Fire pump(s) shall not have any electrical disconnecting meanss between the utility transformer and the electric fire pump controller.

913.3.1.2 Freeze Protection for Fire Pump Room. The temperature maintenance required by 913.3 shall be maintained at all times and shall be connected to the building standby power system when required.

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 9

§ 912.1 and §912.1.1 Installation and Number of Hose Connections

- Removing local amendment, following model Code.

§ 915 of 2024 IFC being replaced with 2021 §915

Chapter 25-12: Local Amendments to the International Fire Code

Chapter 11

1103.7.7 Animal Housing or Care Facilities. An electronically supervised automatic smoke detection system complying with Section 907.2.2.2 shall be installed in all fire areas containing an existing Group B Animal Housing or Care Facility without constant supervision within two (2) years from the date of adoption of this Ordinance.

Chapter 12

1203.2.20 Freeze Protection Equipment. In buildings required to be provided with emergency and/or standby power systems, all equipment required to provide freeze protection for any water-based fire protection system or equipment shall be provided with standby power.

2024 IFC Significant Changes

- **Chapter 50 – Hazardous Materials – General Provisions**

•**5003.13.2 Maximum allowable quantity per rooftop or canopy**. The storage, use and handling of hazardous materials on top of a roof or canopy shall not exceed the maximum allowable quantity set forth in Tables 5003.1.1(1) and 5003.1.1(2). LP-gas storage and use shall be in accordance with Chapter 61.

•**Exceptions:**

•1.Pollution control, exhaust treatment and dust collection equipment when approved.

•2.Hydrogen storage at motor fuel-dispensing facilities in accordance with Chapter 23.

•3.Hazardous materials in closed piping systems complying with this code.

•4. Hazardous materials on top of a normally unoccupied exterior equipment platforms necessary for the operation of mechanical systems or industrial process equipment when approved.

•5. Hazardous materials necessary for rooftop swimming pool or hot tub treatment systems, limited to a maximum container size of 50 gallons (189 L) or 500 lbs (227 kg) of toxic or corrosive materials, and 200 pounds (91 kg) or 20 gallons (76 L) of oxidizers.

•6. Other situations where rooftop storage or use of hazardous materials is necessary for the operation of equipment serving the building and is approved

2024 IFC Significant Changes

- **Appendix B – Fire Flow**

•**B104.1 General.** The *fire-flow calculation area* shall be the total floor area of all floor levels within the *exterior walls*, and under the horizontal projections of the roof of a building.

- **Exceptions:**
- The fire-flow calculation area of buildings constructed of Types IA and IB construction shall be the area of the three largest successive floors.
- The fire-flow calculation area for open parking garages of Types IA and IB construction shall be determined by the area of the largest floor.
- The fire-flow calculation for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be the total combined fire-flow calculation areas for structures separated by less than 10 feet (3.05 m).

•**B104.2 Area separation.** Portions of buildings that are separated by fire walls without openings, constructed in accordance with the International Building Code, are allowed to be considered as separate fire-flow calculation areas.

- **Exception:** The fire-flow calculation area of buildings separated by fire walls with openings, constructed in accordance with the International Building Code, shall be the area of the two adjacent portions of the building with the most demanding fire-flow when combined.

2024 International Fire Code

Significant Changes and Proposed Local Amendments

Questions?

Thank you for your time!