3-28-23

ORDINANCE NO. 32421

An ordinance amending Chapter 53, "Dallas Building Code," of the Dallas City Code, as amended; adopting with certain changes the 2021 Edition of the International Building Code of the International Code Council, Inc.; regulating the construction, enlargement, alteration, repair, demolition, use, and maintenance of construction work in the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

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

SECTION 1. That Chapter 53, "Dallas Building Code," of the Dallas City Code, as amended, is amended by adopting the 2021 Edition of the International Building Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

1. Chapter 1, "Scope and Administration," of the 2021 International Building Code is deleted and replaced with a new Chapter 1, "Scope and Administration," to read as follows:

"CHAPTER 1 SCOPE AND ADMINISTRATION

SECTION 101 GENERAL

- **101.1 Title.** These regulations shall be known as the *Dallas Building Code*, hereinafter referred to as "this code."
- **101.2 Administrative procedures.** Except as otherwise specified in this chapter, all provisions of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* apply to "this code."
- 2. That Subsection 201.3, "Terms Defined in Other Codes," of Section 201, "General," of Chapter 2, "Definitions," of the 2021 International Building Code is amended to read as follows:

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- "201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the <u>Dallas [International]</u> Energy Conservation Code, <u>Dallas [International]</u> Fuel Gas Code, <u>Dallas [International]</u> Fire Code, <u>Dallas [International]</u> Mechanical Code, [OF] <u>Dallas [International]</u> Plumbing Code, <u>Dallas Green Construction Code</u>, <u>Dallas Swimming Pool and Spa Code</u> or Chapter 52, "Administrative Procedures for the Construction Codes," of the <u>Dallas City Code</u>, as amended, such terms shall have the meanings ascribed to them as in those codes."
- 3. Section 202, "Definitions," of Chapter 2, "Definitions," of the 2021 International Building Code is amended by alphabetically adding or amending the following definitions to read as follows:

"[BG] AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided [or staff has accepted responsibility for care recipients already incapable]. This group may include, but is not limited to, the following:

Colonic centers

Dialysis centers

Psychiatric centers

Sedation dentistry

Surgery centers

ASSISTED LIVING FACILITY. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

BUILDING SITE. A site created in one of the ways as required by Section 51A-4.601 of the *Dallas Development Code*.

CODE OFFICIAL. The building official.

convenience stairs if they are not required as *exits* and comply with all other applicable provisions of this code.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, EVSE, a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Amend Chapter 53 (adopt 2021 International Building Code) – Page 2

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

EV CAPABLE SPACE. Electrical panel capacity and space to support a minimum 40-ampere, 208/240-volt branch circuit for each EV parking space, and the installation of raceways, both underground and surface mounted, to support the EVSE.

EV READY SPACE. A designated parking space which is provided with one 40-ampere, 208/240-volt dedicated branch circuit for EVSE servicing *electric vehicles*.

[A] EXISTING BUILDING. An existing building as defined in the *Dallas Existing Building Code* and buildings previously occupied as described in Section 101.4 of the *Dallas Existing Building Code*. [A building erected prior to the date of adoption of the appropriate code, or one for which a legal building *permit* has been issued.]

[BS] EXISTING STRUCTURE. An existing building as defined in the *Dallas Existing Building Code*. [A structure erected prior to the date of adoption of the appropriate code, or one for which a legal building *permit* has been issued.]

EXPOSURE, (Fire). The surrounding location at a fire incident that may be vulnerable to the fire itself. It includes effects from flames, radiant heat flux, convection currents, flying brands, runoff, or exposure to the harmful effects of combustion gases or smoke. The size and range of a fire exposure depends on the severity of the fire causing the exposure.

EXPOSURE PROTECTION. A fire protection measure afforded to locations vulnerable to adjacent fire hazards (radiant heat, convection currents, flying brands, explosion effects or exposure to the harmful effects of combustion gases). Exposure protection may be in the form of active (water sprays) or passive (separation distances, fireproofing) fire protection measures. The term fire-resistive is the preferred term in the construction codes. A properly installed and approved fire-resistive assembly may always be considered to provide exposure protection but all types of exposure protection are not equivalent to a fire-resistive assembly.

[BF] EXTERIOR WALL COVERING. A material or assembly of materials applied on the exterior side of *exterior walls* for the purpose of providing a weather-resisting barrier, insulation or for aesthetics, including but not limited to, *veneers*, siding, *exterior insulation and finish systems*, architectural trim and embellishments such as *cornices*, soffits, facias, gutters and leaders. For the purpose of Chapter 14, exterior wall coverings of Group R means the surfaces of *walls* and ceilings that are above, below, alongside or adjacent to exterior exitways, exterior *stairs* or exterior balconies. Except for *dwellings* that are detached and freestanding, *exterior wall covering* finish requirements apply to all surfaces within 10 feet (3048 mm), measured vertically or horizontally in any direction of any exterior exitway, exterior *stair* or exterior balcony. Group R railings and balustrades are

included in this definition.

FIRE AREA, NONSPRINKLERD BUILDING. The aggregate floor area of all stories enclosed and bounded by fire walls or exterior walls of a building. Areas of the building excluding area increases for the automatic fire sprinkler system. Areas of the building not provided with surrounding walls must be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

[BF] FIRE AREA, OCCUPANCY. The aggregate floor area enclosed and bounded by *fire walls*, *fire barriers*, *exterior walls* or *horizontal assemblies* of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

FIREPROOF. Common trade name for materials used to provide resistance to a fire exposure. Essentially nothing is fireproof, but some materials are resistant to the effects of a fire (heat, flame, etc.) for limited periods. Independent testing agencies such as UL and NIST test submitted materials for a standard fire test exposure for fireproof ratings. NFPA recommends the term fire resistive in place of fireproof.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified standby personnel when required by the fire chief, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

[BG] HIGH-RISE BUILDING. A building having floors used for human occupancy [with an occupied floor] located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

[A] HISTORIC BUILDINGS. Buildings that are <u>designated as historic as defined in the *Dallas Existing Building Code*. [Any building or structure that is one or more of the following:</u>

- 1. Listed or certified as eligible for listing by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places.
- 2. Designated as historic under an applicable state or local law.
- Certified as a contributing resource within a National Register, state designated or locally designated historic district.

MULTIPLE BUILDING TOWNHOUSE. A multiple dwelling unit located on a commercial dwelling site and constructed with a maximum of two units located between exterior walls or fire walls complying with Section 706 of the Dallas Building Code in which each unit extends from foundation to roof and with a yard or public way on at least two sides.

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[BG] OCCUPIABLE SPACE. A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes or in which occupants are engaged at labor, and which is equipped with *means of egress* and light and *ventilation* facilities meeting the requirements of this code. Any space that could be assumed to be occupiable is not exempt from the requirements of this code by designing the space without a *means of egress*, light or ventilation.

[BG] REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

<u>SINGLE BUILDING TOWNHOUSE</u>. A multiple dwelling unit located on a commercial dwelling site with more than two units between exterior wall or fire walls complying with Section 706 in which each unit extends from foundation to roof and with a yard or public way on not less than two sides.

[BS] SPECIAL INSPECTOR. A qualified person employed or retained by an *approved* agency who shall prove to the satisfaction of the responsible registered design professional of record and [approved by] the building official as having the competence necessary to inspect a particular type of construction requiring special inspection.

STANDBY PERSONNEL. Qualified fire service personnel, approved by the fire chief. When utilized, the number required shall be as directed by the fire chief.

TOWNHOME. A dwelling located on a single-family or duplex dwelling site and constructed in a group of abutting structures separated by property lines with each dwelling extending from its foundation to its roof and with a yard or public way on at least two sides.

FHA UNIT. A dwelling unit designed and constructed to be adaptable in accordance with the Fair Housing Act Design Manual—1996 (updated 1998)

- 4. Paragraph 303.1.3, "Associated With Group E Occupancies," of Subsection 303.1, "Assembly Group A," of Section 303, "Assembly Group A," of Chapter 3, "Occupancy Classification and Use," of the 2021 International Building Code is amended to read as follows:
 - "303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy when applying the assembly requirements of Chapters 10 and 11."

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5. Subsection 304.1, "Business Group B," of Section 304, "Business Group B," of Chapter 3, "Occupancy Classification and Use," of the 2021 International Building Code is amended to read as follows:

"304.1 Business Group B. 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 storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers

Ambulatory care facilities

Animal hospitals, kennels and pounds

Banks

Barber and beauty shops

Car wash

Civic administration

Clinic, outpatient

Dry cleaning and laundries: pick-up and delivery stations and self-service

Educational occupancies for students above the 12th grade including *higher education* laboratories

Electronic data processing

Fire stations

Food processing establishments and commercial kitchens not associated with restaurants, cafeterias, and similar dining facilities not more than 2,500 square feet (232 m²) in area

Laboratories: testing and research

Motor vehicle showrooms

Police stations with detention facilities for five or less

Post offices

Print shops

Professional services (architects, attorneys, dentists, physicians, engineers, etc.)

Radio and television stations

Telephone exchanges

Training and skill development not in a school or academic program (this shall include, but not be limited to, tutoring centers, martial arts studios, gymnastics and similar uses regardless of the ages served, and where not classified as a Group A occupancy)."

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6. Subsection [F] 307.1, "High-Hazard Group H." of Section 307, "High-Hazard Group

H," of Chapter 3, "Occupancy and Use Classification," of the 2021 International Building Code is amended to read as follows:

"[F] 307.1 High-hazard Group H. High-hazard Group H occupancy includes, among others, the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or *health hazard* in quantities in excess of those allowed in *control areas* complying with Section 414, based on the maximum allowable quantity limits for *control areas* set forth in Tables 307.1(1) and 307.1(2). Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this section, the requirements of Section 415 and the *Dallas* [*International*] *Fire Code*. *Hazardous materials* stored, or used on top of roofs or canopies, shall be classified as outdoor storage or use and shall comply with the *Dallas* [*International*] *Fire Code*.

[F] 307.1.1 Uses other than Group H. An occupancy that stores, uses or handles *hazardous materials* as described in one or more of the following items shall not be classified as Group H, but shall be classified as the occupancy that it most nearly resembles.

- 1. Buildings and structure occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 and the <u>Dallas</u> [International] Fire Code.
- 2. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the <u>Dallas</u> [International] Fire Code.
- 3. Closed piping system containing *flammable or combustible liquids* or gases utilized for the operation of machinery or equipment.
- 4. Cleaning establishments that utilize *combustible liquid* solvents having a *flash point* of 140°F (60°C) or higher in closed systems employing equipment *listed* by an *approved* testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour *fire barriers* constructed in accordance with Section 707 or 1-hour *horizontal assemblies* constructed in accordance with Section 711, or both. <u>See also Chapter 12 of the *Dallas Fire Code*.</u>
- 5. Cleaning establishments that utilize a liquid solvent having a *flash point* at or above 200°F (93°C).
- 6. Liquor stores and distributors without bulk storage.
- 7. Refrigeration systems.
- 8. The storage or utilization of materials for agricultural purposes on the premises.

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- 9. Stationary storage battery systems installed in accordance with the <u>Dallas</u> [International] Fire Code.
- 10. Corrosive personal or household products in their original packaging used in retail display.
- 11. Commonly used *corrosive* building materials.
- 12. Buildings and structures occupied for *aerosol product* storage, aerosol cooking spray products or plastic aerosol 3 products shall be classified as Group S-1, provided that such buildings conform to the requirements of the <u>Dallas [International]</u> Fire Code.
- 13. Display and storage of nonflammable solid and nonflammable or noncombustible liquid *hazardous materials* in quantities not exceeding the maximum allowable quantity per *control area* in Group M or S occupancies complying with Section 414.2.5.
- 14. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial *explosive* devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the *Dallas* [*International*] *Fire Code*.
- 15. Stationary fuel cell power systems installed in accordance with the <u>Dallas</u> [International] Fire Code.
- 16. Capacitor energy storage systems in accordance with the <u>Dallas</u> [International] Fire Code.
- 17. Group B higher education laboratory occupancies complying with Section 428 and Chapter 38 of the <u>Dallas</u> [International] Fire Code.
- 18. Distilling or brewing of beverages conforming to the requirements of the <u>Dallas</u> [International] Fire Code.
- 19. The storage of beer, distilled spirits and wines in barrels and casks conforming to the requirements of the <u>Dallas</u> [International] Fire Code."
- 7. Paragraph 310.4.1, "Care Facilities Within A Dwelling." of Subsection 310.4, "Residential Group R-3," of Section 310, "Residential Group R," of Chapter 3, "Occupancy and Use Classification," of the 2021 International Building Code is amended to read as follows:

"310.4.1 Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the <u>Dallas One- and Two-Family Dwelling</u> [International Residential] Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the <u>Dallas One- and Two-Family Dwelling</u> [International Residential] Code.

Exception: A facility equivalent to a *dwelling unit* and which complies with Section 903.2.13 may omit the sprinkler system."

- 8. Subsection [F] 402.5, "Automatic Sprinkler System," of Section 402, "Covered Mall and Open Mall Buildings," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "[F] 402.5 Automatic sprinkler system. Covered and open mall buildings and buildings connected shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, which shall comply with all of the following:
 - 1. The *automatic sprinkler system* shall be complete and operative throughout occupied space in the *mall building* prior to occupancy of any of the tenant spaces. Unoccupied, <u>but used</u> tenant spaces shall be similarly protected unless provided with *approved* alternative protection. Protection of unoccupied and unused tenant spaces shall be subject to the approval of the *building official* and the fire marshal.
 - 2. Sprinkler protection for the *mall* of a *covered mall building* shall be independent from that provided for tenant spaces or *anchor buildings*.
 - 3. Sprinkler protection for the tenant spaces of an *open mall building* shall be independent from that provided for *anchor buildings*.
 - 4. Sprinkler protection shall be provided beneath exterior circulation balconies located adjacent to an *open mall*.
 - 5. Where tenant spaces are supplied by the same system, they shall be independently controlled.

Exception: An *automatic sprinkler system* shall not be required in spaces or areas of *open parking garages* separated from the covered or *open mall building* in accordance with Section 402.4.2.3 and constructed in accordance with Section 406.5."

- 9. Subsection 403.1, "Applicability," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "403.1 Applicability. *High-rise buildings* shall comply with Sections 403.2 through 403.6.

Exceptions: The provisions of Sections 403.2 through 403.6 shall not apply to the following buildings and structures:

- 1. Airport traffic control towers in accordance with Section 412.2.
- 2. Open parking garages in accordance with Section 406.5 if the open parking garage is used exclusively for the parking or storage of private passenger motor vehicles or if all other occupancies are located on the ground level tier only.
- 3. Open air [The] portions of [a] buildings containing a Group A-5 occupancy in accordance with Section 303.6. This exception does not apply to enclosed concourses or accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.
- 4. Special industrial occupancies in accordance with Section 503.1.1.
- 5. Buildings containing any one of the following:
 - 5.1. A Group H-1 occupancy.
 - 5.2. A Group H-2 occupancy in accordance with Section 415.8, 415.9.2, 415.9.3 or 426.1.
 - 5.3. A Group H-3 occupancy in accordance with Section 415.8."
- 10. Subsection [F] 403.3, "Automatic Sprinkler System," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "[F] 403.3 Automatic sprinkler system. Buildings and structures shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 403.3.3.

[Exception: An automatic sprinkler system shall not be required in spaces or areas of telecommunications equipment buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2-hour horizontal assemblies constructed in accordance with Section 711, or both.]

[F] 403.3.1 Number of sprinkler risers and system design. Each sprinkler system zone in buildings that are more than 420 feet (128 m) in *building height* shall be supplied by not fewer than two risers. Each riser shall supply sprinklers on alternate floors. If more than two risers are provided for a zone, sprinklers on adjacent floors shall not be supplied from the same riser.

[F] 403.3.1.1 Riser location. Sprinkler risers shall be placed in *interior exit stairways* and *ramps* that are remotely located in accordance with Section 1007.1.

[F] 403.3.2 Water supply to required fire pumps. In all buildings that are more than 120 [420] feet (36.5 [128] m) in building height, [and buildings of Type IVA and IVB construction that are more than 120 feet (36 576 mm) in building height,] required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: Two connections to the same main shall be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through not fewer than one of the connections. The valves shall be placed a distance apart not less than one half of the length of the diagonal dimension of the lot or area to be served, measured in a straight line between the connections.

[F] 403.3.3 Secondary water supply. An *automatic* secondary on-site water supply having a capacity not less than the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for *high-rise buildings* assigned to *Seismic Design Category* C, D, E or F as determined by Section 1613. An additional fire pump shall not be required for the secondary water supply unless needed to provide the minimum design intake pressure at the suction side of the fire pump supplying the *automatic sprinkler system*. The secondary water supply shall have a duration of not less than 30 minutes as determined by the occupancy hazard classification in accordance with NFPA 13.

[F] 403.3.4 Fire pump room. Fire pumps shall be located in rooms protected in accordance with Section 913.2.1."

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- 11. Subparagraph 403.5.3.1, "Stairway Communication System," of Paragraph 403.5.3, "Stairway Door Operation," of Subsection 403.5, "Means of Egress and Evacuation," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is deleted.
- 12. Paragraph 403.5.4, "Smokeproof Enclosures," of Subsection 403.5, "Means of Egress and Evacuation," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "403.5.4 Smokeproof enclosures. Every required *interior exit stairway* serving floors more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access shall be a *smokeproof enclosure* in accordance with Sections 909.20 and 1023.12. <u>In any building that includes interlocking or *scissor stairways* as described in Exception 3 of Section 1007.1.1, both exit stairs of the dual enclosure structure must be a *smokeproof enclosure* or pressurized stairway in accordance with Section 909.20.</u>

Exception: Smokeproof enclosures or pressurized stairs shall not be required in non-underground (see Section 405) buildings protected throughout by an approved automatic sprinkler system. This exception does not apply to a building in which interlocking or scissor stairways are used as two exits in accordance with Section 1007.1.1. Any smokeproof enclosures or pressurized stairs installed as a substitute for a requirement, a reduction of a requirement or an increase in the limits of other requirements of this code is considered a required system."

- 13. Subsection [F] 404.3, "Automatic Sprinkler Protection," of Section 404, "Atriums," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "[F] 404.3 Automatic sprinkler protection. An approved automatic sprinkler system shall be installed throughout the entire building.

Exception[s]:

- [1. That area of a building adjacent to or above the *atrium* need not be sprinklered provided that portion of the building is separated from the *atrium* portion by not less than 2 hour *fire* barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.
- 2.] Where the ceiling of the *atrium* is more than 55 feet (16 764 mm) above the floor, sprinkler protection at the ceiling of the *atrium* is not required."
- 14. Subsection 404.6, "Enclosure of Atriums," of Section 404, "Atriums," of Chapter 4,

"Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building

Code is amended to read as follows:

"404.6 Enclosure of atriums. *Atrium* spaces shall be separated from adjacent spaces by a 1-hour *fire* barrier constructed in accordance with Section 707 or a horizontal assembly constructed in accordance with Section 711, or both.

Exceptions:

- 1. A *fire barrier* is not required where a glass wall forming a *smoke partition* is provided. The glass wall shall comply with all of the following:
 - 1.1. *Automatic* sprinklers are provided along both sides of the separation wall and doors, or on the room side only if there is not a walkway on the *atrium* side. The sprinklers shall be located between 4 inches and 12 inches (102 mm and 305 mm) away from the glass and at intervals along the glass not greater than 6 feet (1829 mm). The sprinkler system shall be designed so that the entire surface of the glass is wet upon activation of the sprinkler system without obstruction;
 - 1.2. The glass wall shall be installed in a gasketed frame in a manner that the framing system deflects without breaking (loading) the glass before the sprinkler system operates; and
 - 1.3. Where glass doors are provided in the glass wall, they shall be either *self-closing* or automatic-closing.
- 2. A *fire barrier* is not required where a glass-block wall assembly complying with Section 2110 and having a ¾-hour *fire protection rating* is provided.

- 3. A *fire barrier is* not required between the *atrium* and the adjoining spaces of up to three floors of the *atrium* provided that such spaces are accounted for in the design of the smoke control system and if the height of the smoke layer interface is maintained above the minimum 6 feet as required in Section 909.8.1. Smoke control analysis must include all relevant information including but not limited to the design fire, height of smoke layer interface, air handler capacity in cubic feet per minute (CFM) and *atrium* volume of air changes per hour (ACH) using the methods of NFPA 92B.
 - 3.1. In other than Group R occupancies, other approaches to smoke management with equivalent results may be considered with the approval of the *building official* and the fire code official.
 - 3.2. In Group R occupancies, a smoke reservoir enclosed by glass walls complying with Section 404.6, Exception 1 is required to the extent that the smoke layer interface drops below 6 feet in height as required in Section 909.8.1.
- 4. A *fire barrier* is not required between the *atrium* and the adjoining spaces where the atrium is not required to be provided with a smoke control system.
- 5. A *horizontal assembly* is not required between the atrium and openings for escalators complying with Section 712.1.3.
- 6. A *horizontal assembly* is not required between the *atrium* and openings for *exit access stairways* and ramps complying with Item 4 of Section 1019.3."
- 15. Subsection 404.10, "Exit Stairways In An Atrium," of Section 404, "Atriums," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "404.10 Exit stairways in an atrium. Where an atrium contains an [interior] exit access stairway all the following shall be met:
 - 1. The entry to the exit stairway is the edge of the closest riser of the exit stairway.
 - 2. The entry of the exit stairway shall have access from a minimum of two directions.
 - 3. The distance between the entry to an exit stairway in an atrium and the entrance to a minimum of one exit stairway enclosed in accordance with Section 1023.2 shall comply with the separation required by Section 1007.1.1.
 - 4. Exit access travel distance shall be measured to the closest riser of the exit stairway.
- 5. Not more than 50 percent of the exit stairways shall be located in the same atrium." Amend Chapter 53 (adopt 2021 International Building Code) Page 14

- 16. Subparagraph 406.3.3.1, "Carport Separation," of Paragraph 406.3.3, "Carports," of Subsection 406.3, "Private Garages and Carports," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
 - "406.3.3.1 Carport separation. A separation is not required between a Group R-3 and U carport, provided that the carport is entirely open on two or more sides and there are not enclosed areas above. A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm)."
- 17. Paragraph 406.5.2, "Openings," of Subsection 406.5, "Open Parking Garages," of Section 406, "Motor-Vehicle-Related Occupancies," of Subchapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "406.5.2 Openings. For natural *ventilation* purposes, the exterior side of the structure shall have uniformly distributed openings on two or more sides. The area of such openings in *exterior walls* on a tier shall not be less than 20 percent of the total perimeter wall area of each tier. The aggregate length of the openings considered to be providing natural *ventilation* shall not be less than 40 percent of the perimeter of the tier. Interior walls shall not be less than 20 percent open with uniformly distributed openings. <u>Use of screens are permissible if calculations are provided that demonstrate</u> no loss in minimum area of openings.

Exception: Openings are not to be distributed over 40 percent of the building perimeter where the required openings are uniformly distributed over two opposing sides of the building.

406.5.2.1 Openings below grade. Where openings below grade provide required natural *ventilation*, the outside horizontal clear space shall be one and one-half times the depth of the opening. The width of the horizontal clear space shall be maintained from grade down to the bottom of the lowest required opening."

- 18. Paragraph 406.5.5, "Area and Height Increases," of Subsection 406.5, "Open Parking Garages," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "406.5.5 Area and height increases. The allowable area and height of *open parking garages* shall be increased in accordance with the provisions of this section. Garages with sides open on three-fourths of the building's perimeter are permitted to be increased by 25 percent in area and one tier in height. Garages with sides open around the entire building's perimeter are permitted to be increased by 50 percent in area and one tier in height. For a side to be considered open under the above provisions, the total area of openings along the side shall not be less than 50 percent of the interior area of the side at each tier and such openings shall be equally distributed along the length of the tier. For purposes of calculating the interior area of the side, the height shall not exceed 7 feet (2134 mm).

Allowable tier areas in Table 406.5.4 shall be increased for *open parking garages* constructed to heights less than the table maximum. The gross tier area of the garage shall not exceed that permitted for the higher structure. Not fewer than three sides of each such larger tier shall have continuous horizontal openings not less than 30 inches (762 mm) in clear height extending for not less than 80 percent of the length of the sides. All parts of such larger tier shall be more than 200 feet (60 960 mm) horizontally from such an opening. In addition, each such opening shall face a street or *yard* with access to a street with a width of not less than 30 feet (9144 mm) for the full length of the opening, and *standpipes* shall be provided in each such tier.

Open parking garages of Type II construction, with all sides open, shall be unlimited in allowable area where the *building height* does not exceed 75 feet (22 860 mm). For a side to be considered open, the total area of openings along the side shall not be less than 50 percent of the interior area of the side at each tier and such openings shall be equally distributed along the length of the tier. For purposes of calculating the interior area of the side, the height shall not exceed 7 feet (2134 mm). All portions of tiers shall be within 200 feet (60 960 mm) horizontally from such openings or other natural *ventilation* openings as defined in Section 406.5.2. These openings shall be permitted to be provided in *courts* with a minimum dimension of 20 feet (6096 mm) for the full width of the openings.

All portions of the open parking garage must be within 130 feet of a standpipe to satisfy fire department access requirements.

Exception: Where a building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, standpipes may be omitted in accordance with Section 905."

- 19. Subsection 406.8, "Repair Garages," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "406.8 Repair garages. Repair garages shall be constructed in accordance with the <u>Dallas</u> [International] Fire Code and Sections 406.2 and 406.8. This occupancy shall include uses as defined in Section 202. This occupancy shall not include motor fuel-dispensing facilities, as regulated in Section 406.7.
 - **406.8.1 Ventilation.** Repair garages shall be mechanically ventilated in accordance with the <u>Dallas</u> [International] Mechanical Code. The ventilation system shall be controlled at the entrance to the garage.
 - [F] 406.8.2 Gas detection system. Repair garages used for the repair of vehicles fueled by nonodorized gases including but not limited to hydrogen and nonodorized LNG, shall be provided with a gas detection system that complies with Section 916. The gas detection system shall be designed to detect leakage of nonodorized gaseous fuel. Where lubrication or chassis service pits are provided in garages used for repairing nonodorized LNG-fueled vehicles, gas sensors shall be provided in such pits.
 - [F] 406.8.2.1 System activation. Activation of gas detection alarm shall result in all of the following:
 - 1. Initiation of distinct audible and visual alarm signals in the *repair garage*, where the *ventilation* system is interlocked with gas detection.
 - 2. Deactivation of all heating systems located in the *repair garage*.
 - 3. Activation of the mechanical *ventilation* system, where the system is interlocked with gas detection.
 - **[F] 406.8.2.2 Failure of the gas detection system.** Failure of the *gas detection system* shall automatically deactivate the heating system, activate the mechanical ventilation system where the system is interlocked with the *gas detection system*, and cause a trouble signal to sound in an *approved* location.
 - [F] 406.8.3 Automatic sprinkler system. A repair garage shall be equipped with an automatic sprinkler system in accordance with Section 903.2.9.1."

- 20. Subsection [F] 411.2, "Automatic Sprinkler System," of Section 411, "Special Amusement Areas," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "[F] 411.2 Automatic sprinkler system. Buildings containing *special amusement areas* shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. Where the *special amusement area* is temporary, the sprinkler water supply shall be of an *approved* temporary means.

Exception: Automatic sprinklers are not required where the total floor area of a temporary special amusement area is less than 7,500 [1,000] square feet (690 [93] m²), [and] the exit access travel distance from any point in the special amusement area to an exit is less than 50 feet (15 240 mm) and the temporary use does not exceed 30 days in any 12-month period."

- 21. Subsection 420.2, "Separation Walls," of Section 420, "Groups I-1, R-1, R-2, R-3 and R-4," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "420.2 Separation walls. Walls separating dwelling units in the same building, walls separating sleeping units in the same building and walls separating dwelling or sleeping units from other occupancies contiguous to them in the same building shall be constructed as fire partitions in accordance with Section 708. Walls separating dwelling or sleeping units from portions of the same occupancy contiguous to them, but not part of the same dwelling or sleeping units, shall be constructed as fire partitions in accordance with Section 708."
- 22. Subsection 420.3, "Horizontal Separation," of Section 420, "Groups I-1, R-1, R-2, R-3 and R-4," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
- "420.3 Horizontal separation. Floor assemblies separating *dwelling units* in the same buildings, floor assemblies separating *sleeping units* in the same building and floor assemblies separating dwelling or *sleeping units* from other occupancies contiguous to them in the same building shall be constructed as *horizontal assemblies* in accordance with Section 711. Floor assemblies separating *dwelling* or *sleeping units*, shall be constructed as horizontal assemblies in accordance with Section 711."

- 23. Paragraph 423.5.1, "Required Occupant Capacity," of Subsection 423.5, "Group E Occupancies," of Section 423, "Storm Shelters," of Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended to read as follows:
 - "423.5.1 Required occupant capacity. The required occupant capacity of the *storm shelter* shall include all of the buildings on the site and shall be the [greater of the following:
 - 1. The] total *occupant load* of the classrooms, vocational rooms and offices in the Group E occupancy.
 - [2. The *occupant load* of the largest indoor assembly space that is associated with the Group E occupancy.]

Exceptions:

- 1. Where a new building is being added on an existing Group E site, and where the new building is not of sufficient size to accommodate the required occupant capacity of the *storm shelter* for all of the buildings on the site, the *storm shelter* shall at a minimum accommodate the required occupant capacity for the new building.
- 2. Where approved by the *building official* the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing *storm shelter* on the site.
- 3. Where approved by the building official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by occupant load calculation, shall be permitted to be used in the determination of the required design occupant capacity for the storm shelter."
- 24. Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended by adding a new Section 429, "Aircraft Noise Attenuation Requirements," to read as follows:

"SECTION 429 AIRCRAFT NOISE ATTENUATION REQUIREMENTS

429.1 Definitions. The following words and terms shall, for the purposes of this chapter, and as used elsewhere in this code, have the meanings shown herein.

A-WEIGHTED SOUND LEVEL. An A-weighted sound level is a sound level in the 1,000 to 6,000 Hz frequency range that is increased by 10 dB if the noise event occurs between 10:00 p.m. and 7:00 a.m. The A-weighted sound level reflects the greater intrusiveness of sounds that the ear perceives as louder compared to other frequencies. "dBA" or "dB(A)" indicate a sound level measurement has been A-weighted.

DAY-NIGHT AVERAGE SOUND LEVEL. The day-night average sound level is the noise exposure in areas around airports (abbreviated as "DNL" in text and " L_{dn} " in equations). DNL is a measure of the average A-weighted sound level of all aircraft flights occurring in a 24-hour period.

429.2 Aircraft noise zone. All land with a DNL noise contour of 65 dBA or greater, as shown on the aircraft noise maps available for review at the Division of Building Inspection, is subject to these regulations. A building that is only partly located within an aircraft noise zone is also subject to these regulations.

429.3 Noise insulation.

429.3.1 Certification of plans prior to issuance of building permit. A registered Texas engineer who has demonstrable knowledge of acoustical engineering shall certify that the plans and specifications comply with the noise insulation standards of Section 429.3.2. The *building official* shall not issue a building permit for any *building* within an aircraft noise zone unless the plans and specifications for the *building* meet the noise insulation standards of Section 429.3.2.

Exception: The plans and specifications may be prepared and certified by a member of the National Council of Acoustical Consultants or another organization approved by the *building official*.

- **Noise insulation standards.** New *buildings* of the following occupancies shall be constructed with sound insulation or other means to achieve a DNL of 45 dBA or less inside the *building*: Group E occupancies; Group I-1, I-2 and I-4 occupancies; and Group R occupancies. If the cost of modifications to an existing *building* is 75 percent or more of the total assessed improvement value of the site, the *building* shall also meet this standard. Garages and similar accessory buildings that do not include living space are exempt from this requirement."
- 25. Chapter 4, "Special Detailed Requirements Based On Occupancy and Use," of the 2021 International Building Code is amended by adding a new Section 430, "Electric Vehicle Charging Facilities," to read as follows:

"SECTION 430 ELECTRIC VEHICLE CHARGING FACILITIES

- **430.1 Electric vehicle (EV) charging for new construction.** New construction shall facilitate future installation and use of *electric vehicle supply equipment (EVSE)* in accordance with the NFPA 70.
 - **430.1.1 New commercial buildings.** *EV ready spaces* and *EV capable spaces* shall be provided in accordance with Table 430.1.1. Where the calculation of percent served results in a fractional parking space, it shall be rounded up to the next whole number. The service panel or sub panel circuit directory shall identify the spaces reserved to support EV charging as "EV Capable" or "EV Ready." The raceway location shall be permanently and visibly marked as "EV Capable."

Where more than one parking facility is provided on a site, electric vehicle ready parking spaces shall be calculated separately for each parking facility. The service panel or subpanel circuit directory shall identify the spaces reserved to support EV charging as "EV-Capable" or "EV- Ready". The raceway location for *EV-Capable Spaces* shall be permanently and visibly marked as "EV-Capable".

TABLE 430.1.1.

EV READY SPACE AND EV CAPABLE SPACE REQUIREMENTS^a

Total Number of Parking	Minimum number of EV	Minimum number of EV				
Spaces	Ready Spaces	Capable Spaces				
1	1	NA				
2 - 10	2	NA				
11 – 15	2	3				
16 – 20	2	4				
21 – 25	2	5				
26+	2	20% of total parking spaces				

a. Where EV-Ready Spaces installed exceed the required values in Table 430.1.1 the additional spaces shall be deducted from the EV-Capable Spaces requirement.

- **430.1.2 Identification.** Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future *EVSE*, raceway methods, wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformers, have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the *EVSE*.
- **430.1.3** EV ready requirements. The circuit shall terminate in a suitable termination point such as a receptacle, junction box, or an *EVSE*, and be located in close proximity to the proposed location of the EV parking spaces. The circuit shall have no other outlets. The service panel shall include an over-current protective device and provide sufficient capacity and space to accommodate the circuit and over-current protective device and be located in close proximity to the proposed location of the EV parking spaces.

- 26. Subsection 503.1, "General," of Section 503, "General Building Height and Area
- Limitations," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building

Code is amended to read as follows:

- "503.1 General. Unless otherwise specifically modified in Chapter 4 and this chapter, building height, number of stories and building area shall not exceed the limits specified in Sections 504 and 506 based on the type of construction as determined by Section 602 and the occupancies as determined by Section 302 except as modified hereafter. Building height, number of stories and building area provisions shall be applied independently. For the purposes of determining area limitations, height limitations and type of construction, each portion of a building separated by one or more fire walls complying with Section 706 shall be considered to be a separate building. Where a building contains more than one distinct type of construction, the building shall comply with the most restrictive area, height and stories, for the lesser type of construction or be separated by fire walls, except as allowed in Section 510.
 - **503.1.1 Special industrial occupancies.** Buildings and structures designed to house special industrial processes that require large areas and unusual *building heights* to accommodate craneways or special machinery and equipment, including, among others, rolling mills; structural metal fabrication of electric, gas or steam power, shall be exempt from the *building height*, number of *stories* and *building area* limitations specified in Sections 504 and 506.
 - **503.1.2 Buildings on same lot.** Two or more buildings on the same lot shall be regulated as separate buildings or shall be considered as portions of one building where the *building height*, number of *stories* of each building and the aggregate *building area* of the buildings are within limitations specified in Sections 504 and 506. The provisions of this code applicable to the aggregate building shall be applicable to each *building*.
 - **503.1.3 Type I construction.** Buildings of Type I construction permitted to be of unlimited tubular *building heights and areas* are not subject to the special requirements that allow unlimited building areas in Section 507 or unlimited *building height* in Sections 503.1.1 and 504.3 or increased *building heights and areas* for other types of construction.
 - **503.1.4 Occupied roofs.** A roof level or portion thereof shall be permitted to be used as an occupancy that is permitted by Table 504.4 for the *story* immediately below the roof. The area of the occupied roofs shall not be included in the *building area* as regulated by Section 506. An occupied roof shall not be included in the *building height* or number of *stories* as regulated by Section 504, provided that the *penthouses* and other enclosed *rooftop structures* comply with Section 1511.

Exceptions:

- 1. The occupancy located on an occupied roof shall not be limited to the occupancies allowed on the *story* immediately below the roof where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and occupant notification in accordance with Sections 907.5.2.1 and 907.5.2.3 is provided in the area of the occupied roof. *Emergency voice/alarm communication* system notification per Section 907.5.2.2 shall also be provided in the area of the occupied roof where such system is required elsewhere in the building.
- 2. Assemble occupancies shall be permitted on roofs of open parking spaces of Type I or Type II construction, in accordance with the exception to Section 903.2.1.6.

503.1.4.1 Enclosures over occupied roof areas. Elements or structures enclosing the occupied roof areas shall not extend more than 48 inches (1220 mm) above the surface of the occupied roof.

Exception: *Penthouses* constructed in accordance with Section 1511.2 and towers, domes, spires and cupolas constructed in accordance with Section 1511.5."

27. Table 504.4, "Allowable Number of Stories Above Grade Plane," of Subsection 504.4, "Number of Stories," of Section 504, "Building Height and Number of Stories," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building Code is amended to read as follows:

"TABLE 504.4 ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE^{a, b}

	TYPE OF CONSTRUCTION												
OCCUPANCY	SEE	Ty	pe I	Type II		Type III		Type IV				Type V	
CLASSIFICATION	FOOTNOTES	A	В	A	В	A	В	A	В	С	HT	A	В
A-1	NS	UL	5	3	2	3	2	3	3	3	3	2	1
	S	UL	6	4	3	4	3	9	6	4	4	3	2
A-2	NS	UL	11	3	2	3	2	3	3	3	3	2	1
	S	UL	12_	4	3	4	3	18	12	6	4	3	2
A-3	NS	UL	11	3	2	3	2	3	3	3	3	2	1
	S	UL	12	4	3	4	3	18	12	6	4	3	2
A-4	NS	UL	11	3	2	3	2	3	3	3	3	2	1
	S	UL	12	4	3	4	3	18	12	6	4	3	2
A-5	NS	UL	UL	UL	UL	UL	UL	1	1	1	UL	UL	UL
	S	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL
В	NS	UL	11	5	3	5	3	5	5	5	5	3	2
	S	UL	12	6	4	6	4	18	12	9	6	4	3
E.	NS	UL	5	_3	2	3	2	3	3	3	3	1_	1
	S	UL	6	4	3	4	3	9	6	4	4	2	2
F-1	NS	UL	11	4	2	3	2	3	3	3	4	2	1

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	S	S	U	U											
F-2											5			1	
1 2														1	
H-1		_	_	_	1	_	-				_	1			
	S	1						1	1	1	1				
H-2	NSc, d	UL	3	2	1	2	1		1	1	2	T		1	
	S							2	2	2	1				
H-3	NSc, d	UL	6	4	2	4	2	3	3	3	4	2	1	1	
								4	4	4	1				
H-4	NSc, d	UL	7	5	3	5	3	5	5	5	5	3	2	1	
		UL	8	6	4	6	4	8	7	6	6	4	3	1	
H-5	NSc, d	4	4	3	3	3	3	2	2	2	3	3	2	1	
		1						3	3	3					
I-1 Condition 1	NSd, e	UL	9	4	3	4	3	4	4	4	4	3	2	1	
		UL	10	5	4	5	4	10	7	5	5	4		1	
I-1 Condition 2	NSd, e	UL	9	4	3	4	3	3	3	3	4	3	2	1	
		UL	10	5				10	6	4	1				
I-2	NSd, f	UL	4	2	1	1	NP	NP	NP	NP	1	1	NP	1	
			5								1				
I-3					1	2	1				2	2	1	i	
1-3	S														
I-4									_						
1-7	S													l	
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				5	5	5	5	18	12	5	5				
R-4 h							_				_				
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				5	5	5	5	18	12	5	5				
S-1															
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S-2											-				
52															
U															
	S	UL	6	5	3	4	3	9	6	5	5	3	2	1	

Note: UL = Unlimited; NP = Not Permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.

- b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.
- d. The NS value is only for use in evaluation of existing building height in accordance with the <u>Dallas</u> [International] Existing Building Code.
- e. New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies, Condition 1, see Exception 1 of Section 903.2.6.
- f. New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the <u>Dallas</u> [International] Fire Code.
- g. For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.
- h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.
- i. For Group E occupancies and rooms normally occupied by pre-kindergarten, kindergarten, or first grade students.
- j. For Group E child day care facilities see Section 308.5.1. All other child day care facilities must comply with the I-4 provisions of this code."
- 28. Table 506.2, "Allowable Area Factor (At=NS, S1, S13R, S13D or SM, As Applicable) In Square Feet," of Subsection 506.2, "Allowable Area Determination," of Section 506, "Building Area," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building Code is amended by deleting footnote i.
- 29. Paragraph 506.3.1, "Minimum Percentage of Perimeter," of Subsection 506.3, "Frontage Increase," of Section 506, "Building Area," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building Code is amended to read as follows:
- "506.3.1 Minimum percentage of perimeter. To qualify for an area factor increase based on frontage, a building shall have not less than 25 percent of its perimeter on a *public way* or open space. Such open space shall be either on the same lot or dedicated for public use and shall be accessed from a street or approved *fire lane*. In order to be considered as accessible, if not in direct contact with a street or *fire lane*, a minimum 10-foot wide pathway meeting the requirements for fire department access from the street or an approved fire lane shall be provided for hose lay measurement pathway requirements."
- 30. Subsection 507.3, "Nonsprinklered, One-Story Buildings," of Section 507, "Unlimited Area Buildings," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building Code is amended to read as follows:

- "507.3 [Nonsprinklered,] O [o]ne-story buildings. The area of a Group F-2 or S-2 building not more than one *story* in height shall not be limited where the building is surrounded and adjoined by *public* ways or yards not less than 60 feet (18 288 mm) in width. Sprinklers shall be provided as per this code."
- 31. Subsection 507.4, "Sprinklered, One-Story Buildings," of Section 507, "Unlimited Area Buildings," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building Code is amended to read as follows:
- "507.4 Sprinklered, one-story buildings. The area of a Group A-4 building no more than one *story* above grade plane of other than Type V construction, or the area of a Group B, F, M or S building no more than one *story above grade plane* of any construction type, shall not be limited where the building is provided with an *automatic sprinkler system* throughout in accordance with Section 903.3.1.1 and is surrounded and adjoined by *public ways* or *yards* not less than 60 feet (18 288 mm) in width.

Exceptions:

- 1. Buildings and structures of Type I and II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of Sections 507.4 and 903.3.1.1 and Chapter 32 of the *Dallas* [*International*] *Fire Code*.
- 2. The *automatic sprinkler system* shall not be required in areas occupied <u>by athletes</u> <u>during their competitive event</u> for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in Group A-4, provided that the following criteria are met:
 - 2.1. *Exit* doors directly to the outside are provided for occupants of the participant sports areas; and
 - 2.2. The building is equipped with a *fire alarm system* with *manual fire alarm boxes* installed in accordance with Section 907.
 - 2.3. An *automatic sprinkler system* is provided in storage rooms, press boxes, concession booths or other spaces ancillary to the sport activity spaces."
- 32. Section 507, "Unlimited Area Buildings," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building Code is amended by adding a new Subsection 507.14, "Unlimited Area Based on Types of Construction," to read as follows:

"507.14 Unlimited area based on types of construction. The area of any five-story or less Type IIA, three-story or less Type IIB, or three-story or less Type IV building, except one housing Group H occupancies, is unlimited if the building is provided with an approved automatic sprinkler system throughout as specified in Chapter 9. These provisions do not apply to covered and open mall buildings, anchor buildings, or motion picture theaters.

Exception: Unlimited area buildings may house Group H Occupancies as specified in Section 507.8."

- 33. Paragraph 508.2.3, "Allowable Building Area," of Subsection 508.2, "Accessory Occupancies," of Section 508, "Mixed Use and Occupancy," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building Code is amended to read as follows:
- "508.2.3 Allowable building area. The allowable area of the building shall be based on the applicable provisions of Section 506 for the main occupancy of the building. Aggregate accessory occupancies shall not occupy more than 10 percent of the floor area of the story in which they are located and shall not exceed the tabular values for non-sprinklered buildings in Table 506.2 for each such accessory occupancy.

Exception: Aggregate accessory occupancies in a building provided throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 shall not occupy more than 20 percent of the area of the story in which they are located and shall not exceed the tabular values in Table 506.2 without building area increases in accordance with Section 506 for such accessory occupancies."

- 34. Subsection 510.2, "Horizontal Building Separation Allowance," of Section 510, "Special Provisions," of Chapter 5, "General Building Heights and Areas," of the 2021 International Building Code is amended to read as follows:
- "510.2 Horizontal building separation allowance. A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of *fire walls*, limitation of number of *stories* and type of construction where all of the following <u>applicable</u> conditions are met:
 - 1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than 3 hours. Where vertical offsets are provided as part of a *horizontal assembly*, the vertical offset and the structure supporting the vertical offset shall have a *fire-resistance rating* of not less than 3 hours. In a structure protected throughout both above and below the *horizontal assembly* with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, the *horizontal assembly* may be of a minimum 2-hour *fire-resistance rating*.

- 2. The building below, including the *horizontal assembly*, is of Type IA construction. 4 6 8
- 3. Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2-hour *fire-resistance rating* with opening protectives in accordance with Section 716.

Exception: Where the enclosure walls below the *horizontal assembly* have not less than the [a 3 hour] fire-resistance rating as required by Condition 1 with opening protectives in accordance with Section 716, the enclosure walls extending above the horizontal assembly shall be permitted to have a 1-hour fire-resistance rating, provided the following conditions are met:

- 1. The building above the horizontal assembly is not required to be of Type I construction;
- 2. The enclosure connects fewer than four stories; and
- 3. The enclosure opening protectives above the horizontal assembly have a fire protection rating of not less than 1 hour.
- 4. Interior exit stairways located within the Type IA building are permitted to be of combustible materials where the following requirements are met:
 - 4.1. The building above the Type IA building is of Type III, IV, or V construction.
 - 4.2. The stairway located in the Type IA building is enclosed by 3-hour fire-resistancerated construction with opening protectives in accordance with Section 716.
- 5. The building or buildings above the *horizontal assembly* shall be permitted to have multiple Group A occupancy uses, each with an occupant load of less than 300, or Group B, M, R or S occupancies.
- 6. The building below the horizontal assembly shall be protected throughout by an approved sprinkler system in accordance with Section 903.3.1.1, and shall be permitted to be any occupancy allowed by this code except Group H.
- 7. The maximum building height in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the grade plane."
- Chapter 5, "General Building Heights and Areas," of the 2021 International Building 35. Code is amended by adding a new Section 511, "Area Limits," to read as follows:

"SECTION 511 AREA LIMITS

- **511.1 Area limits.** All floor area must comply with Sections 511.1.1 through 511.1.3.
 - **511.1.1 Occupancy fire areas.** Occupancy fire areas must be limited in accordance with Sections 903.2.1 through 903.2.10.2.
 - **511.1.2 Nonsprinklered building fire areas.** Nonsprinklered building fire areas must be limited in accordance with Section 903.2.13.
 - **511.1.3 High hazard high-piled storage areas.** A 2-hour fire wall constructed in accordance with Section 706 shall be used to divide all high-piled storage buildings exceeding 500,000 square feet in area. See Section 3207.2 and 3208.2 of the *Dallas Fire Code* for additional fire-resistive separation requirements."
- 36. Table 601, "Fire-Resistance Rating Requirements for Building Elements (Hours)," of Section 601, "General," of Chapter 6, "Types of Construction," of the 2021 International Building Code is amended to read as follows:

"TABLE 601

FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT	TYI	PE I	TYF	E II	TYPE	III			TY	PE IV	TYP	E V	
·	A	В	A	В	A	В	A	В	С	НТ	A.	В	
Primary structural frame ^f	3.a,b	2 a,b,c	1 b,c	0°	1 b,c	0	3 a	2ª	2ª	HT	1 b,c	0	
(see Section 202)													
Bearing walls													
Exterior ^{e, 1, 1}	3	2	1	0	2	2	3	2	2	2	1	0	
Interior	3 a	2ª	1	0	1	0	3	2	2	1/HT ^g	1	0	
Nonbearing walls and partitions Exterior		See Table 705.5											
Nonbearing walls and partitions Interior ^d	0	0	0	0	0	0	0	0	0	See Section 2304.11.2	0	0	
Floor construction and associated secondary members (see Section 202)	2	2	1	0	1	0	2	2	2	НТ	1	0	
Roof construction and associated secondary members h (See Section 202)	1 ½.	1 b,c	1.b,c	o ^c	1. b,c	0	1 ½	1	1	НТ	1. b,c	0	

For SI: 1 foot = 304.8 mm.

- a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
- b. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
- c. In all occupancies, heavy timber complying with Section 2304.11 shall be allowed for roof construction, including primary structural frame members where a 1-hour or less fire-resistance rating is required.
- d. Not less than the fire-resistance rating required by other sections of this code.
- e. Not less than the fire-resistance rating based on fire separation distance (see Table 705.5).
- f. Not less than the fire-resistance rating as referenced in Section 704.10.
- g. Heavy timber bearing walls supporting more than two floors or more than a floor and a roof shall have a fire resistance rating of not less than 1 hour.
- h. In all occupancies, when the building is protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1, roof construction and the structural frame supporting the roof only may be of unprotected noncombustible materials or heavy-timber construction complying with Section 602.4. This provision may be used for roof construction, nonbearing partitions and nonbearing exterior walls in lieu of fire- retardant treated wood in a building meeting the requirements of Section 603.1, Item 1."

- 37. Paragraph 602.4.1, "Type IV-A," of Subsection 602.4, "Type IV," of Section 602
- "Construction Classification" of Chapter 6, "Types of Construction," of the 2021 International Building Code is amended to read as follows:
 - "602.4.1 Type IV-A. Building elements in Type IV-A construction shall be protected in accordance with Sections 602.4.1.1 through 602.4.1.6. The required *fire-resistance rating* of noncombustible elements and protected *mass timber* elements shall be determined in accordance with Sections 703.2 or 703.3.
 - **602.4.1.1 Exterior protection.** The outside face of *exterior walls* of *mass timber* construction shall be protected with *noncombustible protection* with a minimum assigned time of 40 minutes, as specified in Table 722.7.1(1). Components of the *exterior wall covering* shall be of noncombustible material except *water-resistive barriers* having a peak heat release rate of less than 150kW/m², a total heat release of less than 20 MJ/m² and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a *flame spread index* of 25 or less and a *smoke-developed index* of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m².
 - **602.4.1.2 Interior protection.** Interior faces of all *mass timber* elements, including the inside faces of exterior *mass timber* wall and *mass timber* roofs, shall be protected with materials complying with Section 703.3.
 - **602.4.1.2.1 Protection time.** *Noncombustible protection* shall contribute a time equal to or greater than times assigned in Table 722.7.1(1), but not less than 80 minutes. The use of materials and their respective protection contributions specified in Table 722.7.1(2) shall be permitted to be used for compliance with Section 722.7.1
 - **602.4.1.3 Floors.** The floor assembly shall contain a noncombustible material of not less than 1 inch (25 mm) in thickness above the *mass timber*. Floor finishes in accordance with Section 804 shall be permitted on top of the noncombustible material. The underside of floor assemblies shall be protected in accordance with Section 602.4.1.2.
 - **602.4.1.4 Roofs.** The *interior surfaces* of *roof assemblies* shall be protected in accordance with Section 602.4.1.2. *Roof coverings* in accordance with Chapter 15 shall be permitted on the outside surface of the *roof assembly*.

- **602.4.1.5 Concealed spaces.** Concealed spaces shall not contain combustibles other than electrical, mechanical, fire protection, or plumbing materials and equipment permitted in accordance with Section 602 of the <u>Dallas</u> [International] Mechanical Code, and shall comply with all applicable provisions of Section 718. Combustible construction forming concealed spaces shall be protected in accordance with Section 602.4.1.2.
- **602.4.1.6 Shafts.** Shafts shall be permitted in accordance with Sections 713 and 718. Both the *shaft* side and room side of *mass timber* elements shall be protected in accordance with Section 602.4.1.2."
- 38. Subsection 602.4.2, "Type IV-B," of Subsection 602.4, "Type IV," of Section 602

"Construction Classification" of Chapter 6, "Types of Construction," of the 2021 International

Building Code is amended to read as follows:

- "602.4.2 Type IV-B. *Building elements* in Type IV-B construction shall be protected in accordance with Section 602.4.2.1 through 602.4.2.6. The required *fire-resistance rating* of noncombustible elements or *mass timber* elements shall be determined in accordance with Sections 703.2 or 703.3.
 - **602.4.2.1 Exterior protection.** The outside face of *exterior walls* of *mass timber* construction shall be protected with *noncombustible protection* with a minimum assigned time of 40 minutes as specified in Table 722.7.1(1). Components of the *exterior wall covering* shall be of noncombustible material except *water-resistive barriers* having a peak heat release rate of less than 150kW/m², a total heat release of less than 20 MJ/m² and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354, and having a *flame spread index* of 25 or less and a *smoke-developed index* of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m².
 - **602.4.2.2 Interior protection.** Interior faces of all *mass timber* elements, including the inside face of exterior *mass timber* walls and *mass timber* roofs, shall be protected, as required by this section, with materials complying with Section 703.3 [707.3].
 - **602.4.2.2.1 Protection time.** *Noncombustible protection* shall contribute a time equal to or greater than times assigned in Table 722.7.1(1), but not less than 80 minutes. The use of materials and their respective protection contributions specified in Table 722.7.1(2) shall be permitted to be used for compliance with Section 722.7.1.
 - **602.4.2.2.2 Protected area.** Interior faces of *mass timber* elements, including the inside face of exterior *mass timber walls* and *mass timber roofs*, shall be protected in accordance with Section 602.4.2.2.1.

Exceptions: Unprotected portions of mass timber ceilings and walls complying with Section 602.4.2.2.4 and the following:

- 1. Unprotected portions of mass timber ceilings and walls complying with one of the following:
 - 1.1. Unprotected portions of mass timber ceilings, including attached beams, shall be permitted and shall be limited to an area equal to 20 percent of the floor area in any dwelling unit or fire area.
 - 1.2. Unprotected portions of mass timber walls, including attached columns, shall be permitted and shall be limited to an area equal to 40 percent of the floor area in any dwelling unit or fire area.
 - 1.3. Unprotected portions of both walls and ceilings of mass timber, including attached columns and beams, in any dwelling unit or fire area shall be permitted in accordance with Section 602.4.2.2.3.
- 2. Mass timber columns and beams that are not an integral portion of walls or ceilings, respectively, shall be permitted to be unprotected without restriction of either aggregate area or separation from one another.
- **602.4.2.2.3 Mixed unprotected areas.** In each *dwelling unit* or *fire area*, where both portions of ceilings and portions of walls are unprotected, the total allowable unprotected area shall be determined in accordance with Equation 6-1.

$$(U_{tc}/U_{ac}) + (U_{tw}/U_{aw}) \le 1$$
 (Equation 6-1)

where:

 U_{tc} = Total unprotected mass timber ceiling areas.

 U_{ac} = Allowable unprotected mass timber ceiling area conforming to Exception 1.1 of Section 602.4.2.2.2.

 U_{tw} = Total unprotected mass timber wall areas.

 U_{aw} = Allowable unprotected mass timber wall area conforming to Exception 1.2 of Section 602.4.2.2.2.

- **602.4.2.2.4 Separation distance between unprotected mass timber elements.** In each *dwelling unit* or *fire area*, unprotected portions of *mass timber* walls and ceilings shall be not less than 15 feet (4572 mm) from unprotected portions of other walls and ceilings, measured horizontally along the ceiling and from other unprotected portions of walls measured horizontally along the floor.
- **602.4.2.3 Floors.** The floor assembly shall contain a noncombustible material not less than 1 inch (25 mm) in thickness above the *mass timber*. Floor finishes in accordance with Section 804 shall be permitted on top of the noncombustible material. The underside of floor assemblies shall be protected in accordance with Section 602.4.1.2.

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- **602.4.2.4 Roofs.** The *interior surfaces* of roof assemblies shall be protected in accordance with Section 602.4.2.2 except, in nonoccupiable spaces, they shall be treated as concealed space with no portion left unprotected. *Roof coverings* in accordance with Chapter 15 shall be permitted on the outside surface of the roof assembly.
- **602.4.2.5** Concealed spaces. Concealed spaces shall not contain combustibles other than electrical, mechanical, fire protection, of plumbing materials and equipment permitted in plenums in accordance with Section 602 of the <u>Dallas</u> [International] Mechanical Code, and shall comply with all applicable provisions of Section 718. Combustible construction forming concealed spaces shall be protected in accordance with Section 602.4.1.2.
- **602.4.2.6 Shafts.** *Shafts* shall be permitted in accordance with Sections 713 and 718. Both the *shaft* side and room side of *mass timber* elements shall be protected in accordance with Section 602.4.1.2."
- 39. Subsection 603.1, "Allowable Materials," of Section 603, "Combustible Material in Type I and II Construction," of Chapter 6, "Types of Construction," of the 2021 International Building Code is amended to read as follows:
- "603.1 Allowable materials. Combustible materials shall be permitted in buildings of Type I or II construction in the following applications and in accordance with Sections 603.1.1 through 603.1.3:
 - 1. Fire-retardant-treated wood shall be permitted in:
 - 1.1. Nonbearing partitions where the required *fire-resistance rating* is 2 hours or less except in *shaft enclosures* within Group I-2 occupancies and *ambulatory care facilities*.
 - 1.2. Nonbearing exterior walls where fire-resistance rated construction is not required.
 - 1.3. Roof construction, including girders, trusses, framing and decking.

Exceptions:

- 1. In buildings of Type IA construction exceeding two *stories above grade* plane, fire-retardant-treated wood is not permitted in roof construction where the vertical distance from the upper floor to the roof is less than 20 feet (6096 mm).
- 2. Group I-2, roof construction containing *fire-retardant-treated wood* shall be covered by not less than Class A *roof covering* or roof assembly, and the roof assembly shall have a *fire-resistance rating* where required by the construction type.

- 1.4. Balconies, porches, decks and exterior *stairways* not used as required exits on buildings three *stories* or less above grade plane.
- 2. Thermal and acoustical insulation, other than foam plastics, having a *flame spread index* of not more than 25.

Exceptions:

- 1. Insulation placed between two layers of non-combustible materials without an intervening airspace shall be allowed to have a *flame spread index* of not more than 100.
- 2. Insulation installed between a finished floor and solid decking without intervening airspace shall be allowed to have a *flame spread index* of not more than 200.
- 3. Foam plastics in accordance with Chapter 26.
- 4. Roof coverings that have an A, B or C classification.
- 5. *Interior floor finish* and floor covering materials installed in accordance with Section 804.
- 6. Millwork such as doors, door frames, window sashes and frames.
- 7. Interior wall and ceiling finishes installed in accordance with Section 803.
- 8. Trim installed in accordance with Section 806.
- 9. Where not installed greater than 15 feet (4572 mm) above grade, show windows, nailing or furring strips and wooden bulkheads below show windows, including their frames, aprons and show cases.
- 10. Finish flooring installed in accordance with Section 805.
- 11. Partitions dividing portions of stores, offices or similar places occupied by one tenant only and that do not establish a *corridor* serving an *occupant load* of 30 or more shall be permitted to be constructed of *fire-retardant-treated wood*, 1-hour fire-resistance-rated construction or of wood panels or similar light construction up to 6 feet (1829 mm) in height.
- 12. Stages and platforms constructed in accordance with Sections 410.2 and 410.3, respectively.
- 13. Combustible *exterior wall coverings*, balconies and similar projections and bay or oriel windows <u>or similar appendages</u> in accordance with Chapter 14 and Section 705.2.3.1.

- 14. Blocking such as handrails, millwork, cabinets and window and door frames.
- 15. Light-transmitting plastics as permitted by Chapter 26.
- 16. Mastics and caulking materials applied to provide flexible seals between components of *exterior wall* construction.
- 17. Exterior plastic *veneer* installed in accordance with Section 2605.2.
- 18. Nailing or furring strips as permitted by Section 803.15.
- 19. Heavy timber as permitted by Note c to Table 601 and Sections 602.4.4.4 and 705.2.3.1.
- 20. Aggregates, component materials and admixtures as permitted by Section 703.2.1.2.
- 21. Sprayed fire-resistant materials and intumescent and mastic fire-resistant coatings, determined on the basis of *fire-resistance* tests in accordance with Section 703.2 and installed in accordance with Sections 1705.15 and 1705.16, respectively.
- 22. Materials used to protect penetrations in fire-resistance-rated assemblies in accordance with Section 714.
- 23. Materials used to protect *joints* in fire-resistance-rated assemblies in accordance with Section 715.
- 24. Materials allowed in the concealed spaces of buildings of Types I and II construction in accordance with Section 718.5.
- 25. Materials exposed within plenums complying with Section 602 of the <u>Dallas</u> [International] Mechanical Code.
- 26. Wall construction of freezers and coolers of less than 1,000 square feet (92.9 m²), in size, lined on both sides with noncombustible materials and the building is protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- 27. Wood nailers for parapet flashing and roof cants.
- **603.1.1 Ducts.** The use of nonmetallic ducts shall be permitted where installed in accordance with the limitations of the <u>Dallas</u> [<u>International</u>] <u>Mechanical Code</u>.
- 603.1.2 **Piping.** The use of combustible piping materials shall be permitted where installed in accordance with the limitations of the <u>Dallas</u> [International] Mechanical Code and the <u>Dallas</u> [International] Plumbing Code.

- **603.1.3 Electrical.** The use of electrical wiring methods with combustible insulation, tubing, raceways and related components shall be permitted where installed in accordance with the limitations of this code."
- 40. Subparagraph 705.2.3.1, "Balconies and Similar Projections," of Paragraph 705.2.3, "Projection Protection," of Subsection 705.2, "Projections," of Section 705, "Exterior Walls," of Chapter 7, "Fire and Smoke Protection Features," of the 2021 International Building Code is amended to read as follows:
 - "705.2.3.1 Balconies and similar projections. Balconies and similar projections of combustible construction other than *fire-retardant-treated wood* shall be *fire-resistance* rated where required by Table 601 for floor construction or shall be of heavy timber construction in accordance with Section 2304.11. The aggregate length of the projections shall not exceed 50 percent of the building's perimeter on each floor.

- 1. On buildings of Types I and II construction, three *stories* or less above *grade plane*, *fire-retardant-treated wood* shall be permitted for balconies, porches, decks and exterior *stairways* not used as required exits.
- 2. Untreated wood and plastic composites that comply with ASTM D7032 and Section 2612 are permitted for pickets, rails and similar *guard* components that are limited to 42 inches (1067 mm) in height <u>installed at fully sprinklered exterior exit ways</u>, exterior *stairs* or exterior exit balconies of Group R occupancies.
- 3. Balconies and similar projections on buildings of Types III, IV and V construction shall be permitted to be of Type V construction and shall not be required to have a *fire-resistance rating* where sprinkler protection is extended to these areas.
- 4. Where sprinkler protection is extended to the balcony areas, the aggregate length of the balcony on each floor shall not be limited."
- 41. Table 705.5, "Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance," of Section 705, "Exterior Walls," of Chapter 7, "Fire and Smoke Protection Features," of the 2021 International Building Code is amended to read as follows:

"TABLE 705.5

FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE^{a, d, g, l}

FIRE SEPARATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP H ^e	OCCUPANCY GROUP F-1, M, S-1 f	OCCUPANCY GROUP A, B, E, F-2, I, R ¹ , S-2, U ^{h,i,k}
X < 5 ^b	All	3	2	1
	IA, IVA	3	2	1
$5 \le X < 10$	Others	2	1	1
10 ≤ X < 30	IA, IB, IVA, IVB	2	1	1 °
10 \(\times \(\times \)	IIB, VB	1	0	0
	Others	1	1	1°.
X ≥ 30	All	0	0	0

For SI: 1 foot = 304.8 mm.

- a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
- b. See Section 706.1.1 for party walls.
- c. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating,
- d. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- e. For special requirements for Group H occupancies, see Section 415.6.
- f. For special requirements for Group S aircraft hangars, see Section 412.3.1.
- g. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.
- h. For a building containing only a Group U occupancy private garage or carport, the exterior wall shall not be required to have a fire-resistance rating where the fire separation is 5 feet (1523 mm) or greater.
- i. For a Group R-3 building of Type II-B or Type V-B construction, the exterior wall shall not be required to have a fire-resistance rating where the fire separation is 5 feet (1523 mm) or greater.
- j. For special requirements on Group R-2, R-3 and Group U carports, see Section 406.3.5.1.
- k. Exterior walls of carports open on all sides and constructed entirely of noncombustible materials are not required to have a fire-resistance rating. Distance between individual carports and imaginary property lines must be a minimum of 3 feet. All carport projections must comply with Section 705.2.
- In buildings provided throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, Table 602 3-hour exterior wall protection may be reduced to 2-hour protection, Table 602 2-hour protection may be reduced to 1-hour protection. Table 602 1-hour protection cannot be reduced."
- 42. Table 705.8, "Maximum Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection," of Subsection 705.8, "Openings," of Section 705, "Exterior Walls," of Chapter 7, "Fire and Smoke Protection Features," of the 2021 International Building Code is amended to read as follows:

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"TABLE 705.8

MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION

FIRE SEPARATION DISTANCE (feet)	DEGREE OF OPENING PROTECTION	ALLOWABLE AREA ^a		
0 to less than 3 b, c, k	Unprotected, Nonsprinklered (UP, NS)	Not Permitted ^{k, 1}		
	Unprotected, Sprinklered (UP, S)'	Not Permitted ^{k, 1}		
	Protected (P)	Not Permitted ^{k, 1}		
3 to less than 5 de	Unprotected, Nonsprinklered (UP, NS)	Not Permitted		
	Unprotected, Sprinklered (UP, S)	15 %		
	Protected (P)	15%		
5 to less than $10^{e, f, j}$	Unprotected, Nonsprinklered (UP, NS)	10% n		
	Unprotected, Sprinklered (UP, S)'	25%		
	Protected (P)	25%		
10 to less than 15 e, f, gj	Unprotected, Nonsprinklered (UP, NS)	15% h		
	Unprotected, Sprinklered (UP, S) ¹	45%		
	Protected (P)	45%		
15 to less than 20 f, gj	Unprotected, Nonsprinklered (UP, NS)	25%		
	Unprotected, Sprinklered (UP, S)	75%		
	Protected (P)	75%		
20 to less than 25 f, gj	Unprotected, Nonsprinklered (UP, NS)	45%		
	Unprotected, Sprinklered (UP, S)	No Limit		
	Protected (P)	No Limit		
25 to less than 30 f, g,j	Unprotected, Nonsprinklered (UP, NS)	70%		
	Unprotected, Sprinklered (UP, S) ¹	No Limit		
	Protected (P)	No Limit		
30 or greater	Unprotected, Nonsprinklered (UP, NS)	No Limit		
-	Unprotected, Sprinklered (UP, S) ¹	No Limit		
	Protected (P)	No Limit		

For SI: 1 foot = 304.8 mm.

UP, NS = Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

UP, S = Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

- P = Openings protected with an opening protective assembly in accordance with Section 705.8.2.
- a. Values indicated are the percentage of the area of the exterior wall, per story.
- b. For the requirements for fire walls of buildings with differing heights, see Section 706.6.1.
- c. For openings in a fire wall for buildings on the same lot, see Section 706.8.
- d. The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.
- e. Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.
- f. The area of unprotected and protected openings shall not be limited for Group R-3 occupancies, with a fire separation distance of 5 feet or greater.
- g. The area of openings in an open parking structure with a fire separation distance of 10 feet or greater shall not be

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limited.

- h. Includes buildings accessory to Group R-3.
- i. Not applicable to Group H-1, H-2 and H-3 occupancies.
- j. The area of openings in a building containing only a Group U occupancy private garage or carport with a fire separation distance of 5 feet or greater shall not be limited.
- k. For openings between S-2 parking garage and Group R-2 building, see Section 705.3, Exception 2.
- <u>Carports open on all sides and constructed entirely of noncombustible materials may have openings and the openings shall not require protection. Distance between individual carports and imaginary property lines shall be 3 feet minimum. All carport projections shall comply with Section 705.2 of this code."</u>
- 43. Table 706.4, "Fire Wall Fire-Resistance Ratings," of Subsection 706.4, "Fire-Resistance Rating," of Section 706, "Fire Walls," of Chapter 7, "Fire and Smoke Protection Features," of the 2021 International Building Code is amended to read as follows:

"TABLE 706.4 FIRE WALL FIRE-RESISTANCE RATINGS^c

GROUP	FIRE-RESISTANCE RATING (hours)
A, B, E, H-4, I, R-1, R-2, U	3ª
F-1, H-3b, H-5, M, S-1	3
H-1, H-2	4 ^b
F-2, S-2, R-3, R-4	2

- a. In Type II or V construction, walls shall be permitted to have a 2-hour fire-resistance rating.
- b. For Group H-1, H-2 or H-3 buildings, also see Sections 415.7 and 415.8.
- c. In buildings protected throughout by an automatic sprinkler system in accordance with Section 903.3.1.1, 4-hour and 3-hour fire walls may be reduced by 1 hour when separating other than a Group H occupancy. This reduction shall also apply for fire walls required by Section 503.1."
- 44. Paragraph 708.4.2, "Fireblocks and Draftstops in Combustible Construction," of Subsection 708.4, "Continuity," of Section 708, "Fire Partitions," of Chapter 7, "Fire and Smoke Protection Features," of the 2021 International Building Code is amended to read as follows:
 - "708.4.2 Fireblocks and draftstops in combustible construction. In combustible construction where *fire partitions* do not extend to the underside of the floor or roof sheathing, deck or slab above, the space above and along the line of the *fire partition* shall be provided with one of the following:
 - 1. *Fireblocking* up to the underside of the floor or roof sheathing, deck or slab above using materials complying with Section 718.2.1.
 - 2. Draftstopping up to the underside of the floor or roof sheathing, deck or slab above using materials complying with Section 718.3.1 for floors or Section 718.4.1 for *attics*.

- 1. Buildings equipped with an *automatic sprinkler system* installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that protection is provided in the space between the top of the *fire partition* and the underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1. Portions of buildings containing concealed spaces filled with noncombustible insulation as permitted for sprinkler omission shall not apply to this exception for draftstopping.
- 2. Where *corridor* walls provide a *sleeping unit* or *dwelling unit* separation, draftstopping shall only be required above one of the *corridor* walls.
- 3. In Group R-2 occupancies with fewer than four *dwelling unit*, *fireblocking* and draftstopping shall not be required.
- 4. In Group R-2 occupancies up to and including four *stories* in height in buildings not exceeding 60 feet (18 288 mm) in height above *grade plane*, the *attic* space shall be subdivided by *draftstops* into areas not exceeding 3,000 square feet (279 m²) or above every two *dwelling units*, whichever is smaller.
- 5. In Group R-3 occupancies with fewer than three *dwelling units, fireblocking* and draftstopping shall not be required in floor assemblies."
- 45. Paragraph 712.1.9, "Two-Story Openings," of Subsection 712.1, "General," of Section
- 712, "Vertical Openings," of Chapter 7, "Fire and Smoke Protection Features," of the 2021 International Building Code is amended to read as follows:
- "712.1.9 Two-story openings. In other than Groups I-2 and I-3, a vertical opening that is not used as one of the applications specified in this section shall be permitted if the opening complies with all of the following items:
 - 1. Does not connect more than two stories.
 - 2. Does not penetrate a *horizontal assembly* that separates *fire areas* or *smoke barriers* that separate *smoke compartments*.
 - 3. Is not concealed within the construction of a wall or a floor/ceiling assembly.
 - 4. Is not open to a *corridor* in Group I and \underline{H} [\mathbb{R}] occupancies.
 - 5. Is not open to a *corridor* on nonsprinklered floors.
 - 6. Is separated from floor openings and air transfer openings serving other floors by construction conforming to required *shaft enclosures*."

46. Subsection 713.13, "Waste, Recycling and Linen Chutes and Incinerator Rooms," of

Section 713, "Shaft Enclosures," of Chapter 7, "Fire and Smoke Protection Features," of the 2021

International Building Code is amended to read as follows:

"713.13 Waste, recycling and linen chutes and incinerator rooms. Waste, recycling and linen chutes shall comply with the provisions of NFPA 82 including the requirements for venting, Chapter 6 and shall meet the requirements of Sections 712 and 713.13.1 through 713.13.6. Incinerator rooms shall meet the provisions of Sections 713.13.4 through 713.13.5.

Exception: Chutes serving and contained within a single dwelling unit.

- 713.13.1 Waste, recycling and linen chute enclosures. A shaft enclosure containing a recycling, or waste or linen chute shall not be used for any other purpose and shall be enclosed in accordance with Section 713.4. A shaft enclosure shall be permitted to contain recycling and waste chutes. Openings into the shaft, from access rooms and discharge rooms, shall be protected in accordance with this section and Section 716. Openings into chutes shall not be located in corridors. Doors into chutes shall be self-closing. Discharge doors shall be self- or automatic-closing upon the actuation of a smoke detector in accordance with Section 716.2.6.6, except that heat-activated closing devices shall be permitted between the shaft and the discharge room.
- **713.13.2 Materials.** A *shaft enclosure* containing a waste, recycling, or linen chute shall be constructed of materials as permitted by the building type of construction.
- 713.13.3 Chute access rooms. Access openings for waste, recycling or linen chutes shall be located in rooms or compartments enclosed by not less than 1-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. Openings into the access rooms shall be protected by opening protectives having a *fire protection rating* of not less than ¾ hour. Doors shall be self- or automatic-closing upon the detection of smoke in accordance with Section 716.2.6.6. The room or compartment shall be configured to allow the access door to the room or compartment to close and latch with the access panel to the refuse or laundry chute in any position.
- 713.13.4 Chute discharge room. [Table 509.1] Waste, recycling or linen chutes shall discharge into an enclosed room separated by *fire barriers* with a *fire-resistance rating* not less than the required fire rating of the shaft enclosure and constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. Openings into the discharge room from the remainder of the building shall be protected by opening protectives having a *fire protection rating* equal to the protection required for the shaft enclosure. Doors shall be self- or automatic- closing upon the detection of smoke in accordance with Section 716.2.6.6. Waste chutes shall not terminate in an incinerator room. Waste and linen rooms that are not provided with chutes need only comply with Table 509.1.
- 713.13.5 Incinerator room. Incinerator rooms shall comply with Table 509.1.

- **713.13.6 Automatic sprinkler system.** An approved automatic sprinkler system shall be installed in accordance with Section 903.2.11.2."
- 47. Subsection 718.3, "Draftstopping in Floors," of Section 718, "Concealed Spaces," of Chapter 7, "Fire and Smoke Protection Features," of the 2021 International Building Code is amended to read as follows:
- "718.3 Draftstopping in floors. Draftstopping shall be installed to subdivide floor/ceiling assemblies where required by Section 708.4.2. In other than Group R occupancies, draftstopping shall be installed to subdivide combustible floor/ceiling assemblies so that horizontal floor areas do not exceed 1,000 square feet (93 m²).

Exception: Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 <u>and provided that in combustible construction sprinkler protection is provided in the floor space</u>.

- 718.3.1 Draftstopping materials. Draftstopping materials shall be not less than 1/2-inch (12.7 mm) gypsum board, 3/8-inch (9.5 mm) wood structural panel, 3/8-inch (9.5 mm) particleboard, 1-inch (25 mm) nominal lumber, cement fiberboard, batts or blankets of mineral wool or glass fiber, or other approved materials adequately supported. The integrity of draftstops shall be maintained.
- 48. Subsection 718.4, "Draftstopping in Attics," of Section 718, "Concealed Spaces," of Chapter 7, "Fire and Smoke Protection Features," of the 2021 International Building Code is amended to read as follows:
- "718.4 Draftstopping in attics. Draftstopping shall be installed to subdivide *attic* spaces where required by Section 708.4.2. In other than Group R, draftstopping shall be installed to subdivide combustible *attic* spaces and combustible concealed roof spaces such that any horizontal area does not exceed 3,000 square feet (279 m²). *Ventilation* of concealed roof spaces shall be maintained in accordance with Section 1202.2.1.

Exception: Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 and provided that in combustible construction sprinkler protection is provided in the floor space.

- **718.4.1 Draftstopping materials.** Materials utilized for draftstopping of *attic* spaces shall comply with Section 718.3.1.
 - **718.4.1.1 Openings.** Openings in the partitions shall be protected by *self-closing* doors with automatic latches constructed as required for the partitions."

- 49. Paragraph 901.6.1, "Automatic Sprinkler Systems," of Subsection 901.6, "Supervisory Service," of Section 901, "General," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended by adding a new Subparagraph 901.6.1.1, "Standpipe Testing," to read as follows:
 - "901.6.1.1 Standpipe testing. Maintenance of standpipes shall be as per Section 905.12."
- 50. Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2021 International Building Code is amended by adding a new Subsection 901.8, "Systems Out of Service," to read as follows:
- "901.8 Systems out of service. Where a required fire protection system is out of service, or in the event of an excessive number of activations, the fire department and the fire code official shall be notified immediately, and where required by the fire code official, the building must either be evacuated or standby personnel shall be provided for all occupants left unprotected until the protection has been returned to service. Where utilized, *standby personnel* shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires."
- 51. Subsection [F] 903.1, "General," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 903.1 General. Automatic sprinkler systems shall comply with this section.
 - **[F] 903.1.1 Alternative protection.** Alternative *automatic fire-extinguishing systems* complying with Section 904 shall be permitted <u>in addition to</u> [instead of] automatic sprinkler protection where recognized by the applicable standard <u>or as [and]</u> approved by the fire code official.
 - <u>903.1.2 Separation.</u> Areas of buildings protected by automatic sprinklers shall be separated from unsprinklered areas by fire barriers complying with Section 707 having a minimum fire- resistance rating of 2 hours.

- 1. Open parking garages in accordance with Section 406.5.
- Special application, spray booth and kitchen hood suppression systems."
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- 52. Subsection [F] 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 903.2 Where required. Approved *automatic sprinkler systems* in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. <u>Automatic sprinklers must not be installed in elevator machine rooms</u>, elevator machine spaces and elevator hoistways other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage is not allowed within the elevator machine room. Signage must be provided at the entry to the elevator machine room indicating "ELEVATOR MACHINERY NO STORAGE ALLOWED."

[Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an *automatic smoke detection system* in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 or not less than 2-hour *horizontal assemblies* constructed in accordance with Section 711, or both.]

- **[F] 903.2.1 Group A.** An *automatic sprinkler system* shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section.
 - [F] 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the *levels of exit discharge* serving that occupancy where one of the following conditions exists:
 - 1. The fire area exceeds 12,000 square feet (1115 m²).
 - 2. The *fire area* has an *occupant load* of 300 or more.
 - 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
 - 4. The *fire area* contains a multitheater complex.
 - **[F] 903.2.1.2 Group A-2.** An *automatic sprinkler system* shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the *levels of exit discharge* serving that occupancy where one of the following conditions exists:
 - 1. The *fire area* exceeds 5,000 square feet (464 m²);
 - 2. The fire area has an occupant load of 100 or more; or

- 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
- [F] 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the *levels of exit discharge* serving that occupancy where one of the following conditions exists:
 - 1. The *fire area* exceeds 12,000 square feet (1115 m²).
 - 2. The fire area has an occupant load of 300 or more.
 - 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
- **[F] 903.2.1.4 Group A-4.** An *automatic sprinkler system* shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the *levels of exit discharge* serving that occupancy where one of the following conditions exists:
 - 1. The fire area exceeds 12,000 square feet (1115 m²).
 - 2. The fire area has an occupant load of 300 or more.
 - 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
- **[F] 903.2.1.5 Group A-5.** An *automatic sprinkler system* shall be provided for all enclosed Group A-5 accessory use areas in excess of 1,000 square feet (93 m²).
 - **[F] 903.2.1.5.1 Spaces under grandstands or bleachers:** Enclosed spaces under *grandstands* or *bleachers* shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1 where either of the following exist:
 - 1. The enclosed area is 1,000 square feet (93 m²) or less and is not constructed in accordance with Section 1030.1.1.1.
 - 2. The enclosed area exceeds 1,000 square feet (93 m²).
- **[F] 903.2.1.6 Assembly occupancies on roofs.** Where an occupied roof has an assembly occupancy with an *occupant load* exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the occupied roof and the *level of exit discharge* shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.

Exception: Open parking garages of Type I or Type II construction.

903.2.1.7 Multiple fire areas. An *automatic sprinkler system* shall be provided where multiple *fire areas* of Group A-1, A-2, A-3, or A-4 occupancies share *exit* or exit access components and the combined *occupant load* of these fire areas is 300 or more.

[F] 903.2.2 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

- 1. Four or more care recipients are incapable of self-preservation.
- 2. One or more care recipients that are *incapable of self-preservation* are located at other than the *level of exit discharge* serving such a facility.

In buildings where ambulatory care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest *level of exit discharge*, the *level of exit discharge*, and all floors below the level of *exit discharge*.

Exception: Floors classified as an *open parking garage* are not required to be sprinklered.

[F] 903.2.3 Group E. An *automatic sprinkler system* shall be provided for Group E occupancies as follows:

- 1. Throughout all Group E *fire areas* greater than 12,000 square feet (1115 m²) in area.
- 2. The Group E *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an *automatic sprinkler system* is not required in any area below the lowest *level of exit discharge* serving that area.

3. The Group E *fire area* has an occupant load of 300 or more.

[F] 903.2.4 Group F-1. An *automatic sprinkler system* shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

- 1. A Group F-1 fire area exceeds 12,000 square feet (1115 m²).
- 2. A Group F-1 fire area is located more than three stories above grade plane.
- 3. The combined area of all Group F-1 *fire areas* on all floors, including any *mezzanines*, exceeds 24,000 square feet (2230 m²).

- **[F] 903.2.4.1 Woodworking operations.** An *automatic sprinkler system* shall be provided throughout all Group F-1 occupancy *fire areas* that contain wood-working operations in excess of 2,500 square feet (232 m²) in area that generate finely divided combustible waste or use finely divided combustible materials.
- **[F] 903.2.4.2 Group F-1 distilled spirits.** An *automatic sprinkler system* shall be provided throughout a Group F-1 *fire area* used for the manufacture of distilled spirits <u>involving more than</u> 120 gallons of distilled spirits (>16% alcohol) in the fire area at any one time.
- [F] 903.2.4.3 Group F-1 upholstered furniture or mattresses. An automatic sprinkler system shall be provided throughout a Group F-1 *fire area* that exceeds 2,500 square feet (232 m²) used for the manufacture of upholstered furniture or mattresses.
- **[F] 903.2.5 Group H.** Automatic sprinkler systems shall be provided in high-hazard occupancies as required in Sections 903.2.5.1 through 903.2.5.3.
 - [F] 903.2.5.1 General. An automatic sprinkler system shall be installed in Group H occupancies.
 - [F] 903.2.5.2 Group H-5 occupancies. An *automatic sprinkler system* shall be installed throughout buildings containing Group H-5 occupancies. The design of the sprinkler system shall not be less than that required by this code for the occupancy hazard classifications in accordance with Table 903.2.5.2.

Where the design area of the sprinkler system consists of a *corridor* protected by one row of sprinklers, the maximum number of sprinklers required to be calculated is 13.

- **[F] 903.2.5.3 Pyroxylin plastics.** An *automatic sprinkler system* shall be provided in buildings, or portions thereof, where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg).
- **[F] 903.2.6 Group I.** An *automatic sprinkler system* shall be provided throughout buildings with a Group I *fire area*.

- 1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 Condition 1 facilities.
- 2. An *automatic sprinkler system* is not required where Group I-4 day care facilities are at the *level of exit discharge* and where every room where care is provided has not fewer than one exterior exit door.

- 3. In buildings where Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the *level of exit discharge*, and all floors below the *level of exit discharge* other than areas classified as an open parking garage.
- [F] 903.2.7 Group M. An *automatic sprinkler system* shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:
 - 1. A Group M fire area exceeds 12,000 square feet (1115 m²).
 - 2. A Group M fire area is located more than three stories above grade plane.
 - 3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
 - [F] 903.2.7.1 High-piled storage. An automatic sprinkler system shall be provided in accordance with the <u>Dallas</u> [International] Fire Code in all buildings of Group M where storage of merchandise is in high-piled or rack storage arrays.
 - **[F] 903.2.7.2 Group M upholstered furniture or mattresses.** An *automatic sprinkler system* shall be provided throughout a Group M *fire area* where the aera used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).
- **[F] 903.2.8 Group R.** An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.
 - Exception: A dwelling, townhome, townhouse, Group R-4 care facility with five or fewer persons that are within a single family or lodging house which complies with Section 903.2.13.
 - **[F] 903.2.8.1 Group R-3.** An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 occupancies.
 - **[F] 903.2.8.2 Group R-4, Condition 1.** An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in Group R-4, Condition 1 occupancies.
 - [F] 903.2.8.3 Group R-4, Condition 2. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group R-4, Condition 2 occupancies.
 - [F] 903.2.8.4 Care facilities. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in care facilities with five or fewer individuals in a single-family dwelling.

[F] 903.2.9 Group S-1. An *automatic sprinkler system* shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

- 1. A Group S-1 *fire area* exceeds 12,000 square feet (1115 m²).
- 2. A Group S-1 *fire area* is located more than three stories above *grade plane*.
- 3. The combined area of all Group S-1 *fire areas* on all floors, including any *mezzanines*, exceeds 24,000 square feet (2230 m²).
- 4. A Group S-1 *fire area* used for the storage of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464 m²).

[F] 903.2.9.1 Repair garages. An *automatic sprinkler system* shall be provided throughout all buildings used as *repair garages* in accordance with Section 406, as shown:

- 1. Buildings having two or more *stories above grade plane*, including basements, with a *fire area* containing a *repair garage* exceeding 10,000 square feet (929 m²).
- 2. Buildings not more than one *story above grade plane*, with a *fire area* containing a *repair garage* exceeding 12,000 square feet (1115 m²).
- 3. Buildings with *repair garages* servicing vehicles parked in basements.
- 4. A Group S-1 *fire area* used for the repair of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464 m²).

[F] 903.2.9.2 Bulk storage of tires. Buildings and structures where the area for the storage of tires exceeds 20,000 cubic feet (566 m³) shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

[F] 903.2.9.3 Group S-1 Distilled spirits or wine. An automatic sprinkler system shall be provided throughout a Group S-1 fire area used for the bulk storage of distilled spirits or wine involving more than 120 gallons of distilled spirits or wine (>16% alcohol) in the fire area at any one time.

[F] 903.2.9.4 Group S-1 upholstered furniture and mattresses. An *automatic sprinkler system* shall be provided throughout a Group S-1 *fire area* where the aera used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²). This use must also comply with the applicable provisions of Chapter 32, "High-Pile Combustible Storage," of the *Dallas Fire Code* due to the presence of Group A plastics used in upholstered furniture and mattresses.

[Exception: Self storage facilities not greater than one story above grade plane where all storage spaces can be accessed directly from the exterior.]

903.2.9.5 Self-service storage facilities. An automatic sprinkler system must be installed throughout all self-service storage facilities.

[F] 903.2.10 Group S-2 enclosed parking garages. An automatic sprinkler system shall be provided throughout buildings classified as parking garages where any of the following conditions exists:

- 1. Where the fire area of the enclosed parking garage in accordance with Section 406.6 exceeds 12,000 square feet (1115 m²)
- 2. Where the enclosed parking garage in accordance with Section 406.6 is located beneath other groups.

Exception: Enclosed parking garages located beneath Group R-3 occupancies.

3. Where the *fire area* of the *open parking garage* in accordance with Section 406.5 exceeds 48,000 square feet (4460 m²).

[F] 903.2.10.1 Commercial parking garages. An *automatic sprinkler system* shall be provided throughout buildings used for storage of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (4464 m²).

[F] 903.2.10.2 Mechanical-access enclosed parking garages. An approved automatic sprinkler system shall be provided throughout buildings used for the storage of motor vehicles in a mechanical-access enclosed parking garage. The portion of the building that contains the mechanical-access enclosed parking garage shall be protected with a specially engineered automatic sprinkler system.

[F] 903.2.11 Specific building areas and hazards. In all occupancies other than Group U, an *automatic sprinkler system* shall be installed for building design or hazards in the locations set forth in Sections 903.2.11.1 through 903.2.11.8 [903.2.11.6].

[F] 903.2.11.1 Stories without openings. An automatic sprinkler system shall be installed throughout all stories, including basements, of all buildings where the floor area exceeds 1,500 square feet (139.4 m²) and where the story does not comply with the criteria for exterior wall openings:

1. Openings below grade that lead directly to ground level by an exterior *stairway* complying with Section 1011 or an outside *ramp* complying with Section 1012. Openings shall be located in each 50 linear feet (15 240 mm), or fraction thereof, of *exterior wall* in the *story* on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm).

- 2. Openings entirely above the adjoining ground level totaling at least 20 square feet (1.86 m²) in each 50 linear feet (15 240 mm), or fraction thereof, of *exterior wall* in the *story* on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm). The height of the bottom of the clear opening shall not exceed 44 inches (1118 mm) measured from the floor.
- **[F] 903.2.11.1.1 Opening dimensions and access.** Openings shall have a minimum dimension of not less than 30 inches (762 mm). Access to such openings shall be provided for the fire department from the exterior and shall not be obstructed in a manner that fire fighting or rescue cannot be accomplished from the exterior.
- **[F] 903.2.11.1.2. Openings on one side only.** Where openings in a *story* are provided on only one side and the opposite wall of such *story* is more than 75 feet (22 860 mm) from such openings, the *story* shall be equipped throughout with an *approved automatic sprinkler system*, or openings shall be provided on at least two sides of the *story*.
- **[F] 903.2.11.1.3 Basements.** Where any portion of a *basement* is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, or where walls, partitions or other obstructions are installed that restrict the application of water from hose streams, the *basement* shall be equipped throughout with an *approved automatic sprinkler system*.
- [F] 903.2.11.2 Rubbish and linen chutes. An *automatic sprinkler system* shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes shall have additional sprinkler heads installed at alternate floors and at the lowest intake. Where a rubbish chute extends through a building more than one floor below the lowest intake, the extension shall have sprinklers installed that are recessed from the drop area of the chute and protected from freezing in accordance with Section 903.3.1.1. Such sprinklers shall be installed at alternate floors, beginning with the second level below the last intake and ending with the floor above the discharge. Access to sprinklers in chutes shall be provided for servicing.
- [F] 903.2.11.3 Buildings 55 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories other than penthouses in compliance with Section 1511 [with an occupant load of 30 or more] located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

[Exception: Occupancies in Group F-2.]

[F] 903.2.11.4 Ducts conveying hazardous exhausts. Where required by the <u>Dallas</u> [International] Mechanical Code, automatic sprinklers shall be provided in ducts conveying hazardous exhaust or flammable or combustible materials.

Exception: Ducts where the largest cross-sectional diameter of the duct is less than 10 inches (254 mm).

- **[F] 903.2.11.5 Commercial cooking operations.** An *automatic sprinkler system* shall be installed in commercial kitchen exhaust and duct systems where an *automatic sprinkler system* is used to comply with Section 904.
- **[F] 903.2.11.6 Other required suppression systems.** In addition to the requirements of Section 903.2, the provisions indicated in Table 903.2.11.6 require the installation of a fire protection system for certain buildings and areas.
- 903.2.11.7 High-piled combustible storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 of the Dallas Fire Code to determine if those provisions apply.
- 903.2.11.8 Spray booths and rooms. New and existing spray booths and spraying rooms must be protected by an *approved automatic fire-extinguishing system*.
- [F] 903.2.12 During construction. Automatic sprinkler systems required during construction, alteration and demolition operations shall be provided in accordance with Chapter 33 of the <u>Dallas</u> [International] Fire Code.
- 903.2.13 Nonsprinklered building fire areas. Any qualified building area must provide a minimum number of fire walls throughout the building such that no building fire area exceeds the limits of the number listed in Table 903.2.13. Qualified building area is the total allowable area which has been determined first by the methods of increase as given in Section 506 without using the increases for sprinklers.

Exception: Fire walls are not required in accordance with this section in any of the following cases:

- 1. Buildings that have an approved automatic sprinkler system installed throughout in accordance with Sections 903.3.1.1 and 903.3.1.2.
- Open air portions of Group A, Division 5 occupancies.
- 3. Open parking garages complying with Section 406.5.
- 4. Buildings of Type I or Type II construction used exclusively for noncombustible contents or the storage of noncombustible material not packed or crated in combustible material.
- 5. The floor area of existing nonsprinklered buildings housing other than Group H occupancies may be increased by not more than 5 percent. The floor area increase must not exceed 2,500 square feet (232.25 m²). Not more than one increase in floor area is permitted under this exception.
- 6. Membrane structures when authorized by the building official."

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53. Subsection [F] 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended by adding a new Table 903.2.13, "Nonsprinklered Building Fire Area Limits (Sq. Ft.)," to read as follows:

"TABLE 903.2.13 NONSPRINKLERED BUILDING FIRE AREA LIMITS (SQ. FT.)

GROUP	TYPE OF CONSTRUCTION									
	TYPE I		TYPE II		ТҮРЕ ІІІ		TYPE IV	TYPE IV	TYPE V	
	A	В	A	В	A	В	A-C	НТ	A	В
A ¹	25,000	25,000	15,000	8,500	14,000	8,500	NP	15,000	11,500	5,500
$A^{2,3}$	25,000	25,000	15,000	8,500	15,000	8,500	NP	15,000	15,000	5,500
A ⁴ , F, M, S-1, S-2 ⁵	25,000	25,000	15,000	10,000	15,000	10,000	NP	15,000	15,000	7,500
A-4 ⁶							NP			
A-5 ⁷ , B ⁸ ,	35,000	35,000	20,000	15,000	20,000	15,000	NP	20,000	15,000	7,500
\mathbf{B}^9	25,000	25,000	15,000	10,000	15,000	10,000	NP	15,000	15,000	7,500
H, I-1, I- 3, I-4	0	0	0	0	0	0	NP	0	0	0
I-2	0	0	0	0	0	NP	NP	0	0	NP
R	7,500	7,500	7,500	7,500	7,500	7,500	NP	7,500	7,500	7,500
U ¹⁰							NP			
U ^{11, 12}							NP			

For SI: 1 foot = 305 mm, 1 square foot = 0.0929 m^2 .

NP: Not Permitted

Blank areas: Refer to applicable footnotes.

1. Assembly with a stage and occupant load of 1,000 or more. Amend Chapter 53 (adopt 2021 International Building Code) – Page 54

- 2. Assembly with a stage and occupant load of less than 1,000.
- 3. Assembly without a stage with occupant load of 300 or more.
- 4. Assembly without a stage with occupant load of less than 300.
- 5. Open parking garages. See Sections 406.5, 403.1, and 903.2.13, Exception 3.
- 6. Indoor sports, see Footnote 1, 2, 3 or 4, as appropriate.
- 7. Stadiums, reviewing stands, amusement park structures not with other A occupancy. See Sections 903.2.13 and 403.1.
- 8. Office buildings, police and fire stations, buildings with rooms used for education beyond 12th grade with less than 50 persons.
- 9. All other B occupancies.
- 10. Private garages and carports. See Section 406.3.
- 11. Fences over 6 feet high, tanks, sheds and agricultural buildings not classifiable in other occupancies.
- 12. Towers, See Section 412."
- 54. Paragraph [F] 903.3.1, "Standards," of Subsection [F] 903.3, "Installation Requirements," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
 - "[F] 903.3.1 Standards. Sprinkler systems shall be designed and installed in accordance with Section 903.3.1.1 unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable.
 - **[F] 903.3.1.1 NFPA 13 sprinkler systems.** Where the provisions of this code require that a building or portion thereof be equipped throughout with an *automatic sprinkler system* in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Sections 903.3.1.1.1 and 903.3.1.1.2.
 - [F] 903.3.1.1.1 Exempt locations. When approved by the *fire code official*, a[A]utomatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an *approved* automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from a room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.
 - 1. A room where the application of water, or flame and water, constitutes a serious life or fire hazard.
 - 2. A room or space where sprinklers are considered undesirable because of the nature of the contents, where *approved* by the fire code official.

- 3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a *fire-resistance rating* of not less than 2 hours.
- 4. [Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
- 5. Fire service access] <u>E[e]</u>levator machine rooms, [and] machinery spaces and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
- [6. Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008.]

[F]903.3.1.1.2. Residential systems. Residential sprinkler systems installed in accordance with Sections 903.3.1.2 and 903.3.1.3 will be recognized for the purposes of exceptions or reductions, commonly referred to as "trade-offs," only if permitted by other provisions of this code. [Bathrooms. In Group R occupancies sprinklers shall not be required in bathrooms that do not exceed 55 square feet (5 m²) in area and are located within individual dwelling units or sleeping units, provided that walls and ceilings, including the walls and ceilings behind a shower enclosure or tub, are of noncombustible or limited combustible materials with a 15-minute thermal barrier rating.]

[F] 903.3.1.2 NFPA 13R sprinkler systems. *Automatic sprinkler systems* in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions. <u>Refer also to Section 903.3.1.1.2.</u>

- 1. Four stories or fewer above grade plane.
- 2. The floor level of the highest *story* is 35 [30] feet (10 668 [9144] mm) or less above the lowest level of fire department vehicle access.
- 3. The floor level of the lowest *story* is $\underline{35}$ [$\underline{30}$] feet ($\underline{10}$ 668 [$\underline{9144}$] mm) or less below the lowest level of fire department vehicle access.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 shall be measured from grade plane.

[F] 903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of *dwelling units* and *sleeping units* where either of the following conditions exists:

1. The building is of Type V construction, provided there is a roof or deck above.

2. Exterior balconies, decks and ground floor patios of dwelling units and sleeping units are constructed in accordance with Section 705.2.3.1, Exception 3.

Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

[F] 903.3.1.2.2 Corridors and balconies [in the means of egress]. Sprinkler protection shall be provided in <u>all corridors</u> and for <u>all</u> balconies. [in the means of egress where any of the following conditions apply:

- 1. Corridors with combustible floor and walls.
- 2. Corridors with an interior change of direction exceeding 45 degrees (0.79 rad).
- 3. Corridors that are less than 50 percent open to the outside atmosphere at the ends.
- Open ended corridors and associated exterior stairways and ramps as specified in Section 1027.6, Exception 3.
- 5. Egress balconies not complying with Sections 1021.2 and 1021.3.]

[F]903.3.1.2.3 Attached garages and attics. Sprinkler protection is required in attached garages, and in the following attic spaces: [Attics. Attic protection shall be provided as follows:]

- 1. *Attics* that are used or intended for living purposes or storage shall be protected by an *automatic sprinkler system*.
- 2. Where fuel-fired equipment is installed in an unsprinklered *attic*, not fewer than one quick-response intermediate temperature sprinkler shall be installed above equipment.
- 3. Attic spaces of buildings that are two or more stories in height above grade plane or above the lowest level of fire department vehicle access. [Where located in a building Type III, Type IV or Type V construction designed in accordance with Section 510.2 or 510.4, attics not required by Item 1 to have sprinklers shall comply with one of the following if the roof assembly is located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access needed to meet the provisions in Section 503.
 - 3.1. Provide automatic sprinkler system protection.
 - 3.2. Construct the attic using noncombustible materials.

- 3.3. Construct the *attic* using *fire-retardant-treated* wood complying with Section 2303.2.
- 3.4. Fill the attic with noncombustible insulation.

The height of the roof assembly shall be determined by measuring the distance from the lowest required fire vehicle access road surface adjacent to the building to the eave of the highest pitched roof, the intersection of the highest roof to the exterior wall, or the top of the highest parapet, whichever yields the greatest distance. For the purpose of this measurement, required fire vehicle access roads shall include only those roads that are necessary for compliance with Section 503 of the *International Fire Code*.]

- 4. Group R-4, Condition 2 occupancy *attics* not required by Item 1 or 3 to have sprinklers shall comply with one of the following:
 - 4.1. Provide automatic sprinkler system protection.
 - 4.2. Provide a heat detection system throughout the *attic* that is arranged to activate the building fire alarm system.
 - 4.3. Construct the *attic* using non-combustible materials.
 - 4.4. Construct the *attic* using *fire-retardant-treated wood* complying with Section 2303.2 of the *Dallas Building Code*.
 - 4.5. Fill the *attic* with noncombustible insulation.

[F] 903.3.1.3 NFPA 13D sprinkler systems. *Automatic sprinkler systems* installed in one- and two-family *dwellings*; Group R-3; Group R-4, Condition 1; and *townhouses* shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law. Refer also to Section 903.3.1.1.2.

[F] 903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

<u>903.3.1.4.1</u> <u>Attics.</u> Only dry-pipe, pre-action or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

- the attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building.
- 2. adequate heat is provided for freeze protection in accordance with the applicable referenced NFPA standard, and
- 3. the attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.
- 903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe."
- 55. Paragraph [F] 903.3.5, "Water Supplies," of Subsection [F] 903.3, "Installation Requirements," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 903.3.5 Water supplies. Water supplies for *automatic sprinkler systems* shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the <u>Dallas</u> [International] Plumbing Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi (69 Pa) safety factor. Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 12 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction. Refer to Section 507.4 for additional design requirements.

- **[F] 903.3.5.1 Domestic services.** Where the domestic service provides the water supply for the *automatic sprinkler system*, the supply shall be in accordance with this section.
- [F] 903.3.5.2 [Residential e] Combination services. In all NFPA 13 and 13R designs, a[A] single combination water supply shall be allowed provided that the domestic demand is added to the sprinkler demand as required by NFPA 13, 13R, and 13D. Combination services four inches and larger shall be subject to the acceptance tests contained in the installation standards. Acceptance tests shall be witnessed and approved by the fire code official."

56. Subsection [F] 903.4, "Sprinkler System Supervision and Alarms," of Section 903,

"Automatic Sprinkler Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021

International Building Code is amended to read as follows:

"[F] 903.4 Sprinkler system supervision and alarms. All v[V] alves on the building side of the water meter controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

Exceptions:

- 1. Automatic sprinkler systems protecting one- and two-family dwellings.
- 2. Limited area sprinkler systems in accordance with Section 903.3.8.
- 3. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
- 4. Jockey pump control valves that are sealed or locked in the open position.
- 5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
- 6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- 7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.
- 8. Underground key or hub gate valves in roadway boxes.

Sprinkler and standpipe system water-flow detectors must be provided for each floor tap to the sprinkler system and must cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves must be electrically supervised to initiate a supervisory signal at the central station upon tampering.

[F] 903.4.1 Monitoring. Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an *approved* supervising station or, where *approved* by the fire code official, shall sound an audible signal at a *constantly attended location*.

Exception: Backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

- [F] 903.4.2 Alarms. A weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection [An approved audible device, located on the exterior of the building in an approved location,] shall be connected to every [each] automatic sprinkler system. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.
- **[F] 903.4.3 Floor control valves.** *Approved* supervised indicating control valves shall be provided at the point of connection to the riser on each floor in high-rise-buildings."
- 57. Subsection [F] 905.2, "Installation Standard," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 905.2 Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig (69 kPa) and a maximum of 40 psig (276 kPa) air pressure with a high/low alarm. Fire department connections for standpipe systems shall be in accordance with Section 912."
- 58. Subsection [F] 905.3, "Required Installations," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 905.3 Required installations. Standpipe systems shall be installed where required by Sections 905.3.1 through 905.3.9 [905.3.8]. Standpipe systems are allowed to be combined with *automatic sprinkler systems*.

Exception: Standpipe systems are not required in Group R-3 occupancies.

- [F] 905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where any of the following conditions exist:
 - 1. Four or more stories are above or below grade plane.

- 2. The floor level of the highest *story* is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access.
- 3. The floor level of the lowest *story* is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.

Exceptions:

- 1. Class I standpipes are allowed in buildings equipped throughout with an *automatic* sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. Class I standpipes are allowed in Group B and E occupancies.
- 3. Class I manual standpipes are allowed in parking garages.
- 4. Class I standpipes are allowed in basements equipped throughout with an *automatic sprinkler system*.
- 5. Class I standpipes are allowed in buildings where occupant-use hose lines will not be utilized by trained personnel or the fire department.
- 6. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
 - 6.1. Recessed loading docks for four vehicles or less.
 - 6.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

[F] 905.3.2 Group A. Class I automatic wet standpipes shall be provided in nonsprinklered Group A buildings having an *occupant load* exceeding 1,000 persons.

- 1. Open-air-seating spaces without enclosed spaces.
- Class I automatic dry and semiautomatic dry standpipes or manual wet standpipes are allowed in buildings that are not high rise buildings.]

- [F] 905.3.3 Covered and open mall buildings. Covered mall and open mall buildings shall be equipped throughout with a standpipe system where required by Section 905.3.1. Mall buildings not required to be equipped with a standpipe system by Section 905.3.1 shall be equipped with Class I hose connections connected to the *automatic sprinkler system* sized to deliver water at 250 gallons per minute (946.4 L/min) at the hydraulically most remote hose connection while concurrently supplying the automatic sprinkler system demand. The standpipe system shall be designed to not exceed a 50 pounds per square inch (psi) (345 kPa) residual pressure loss with a flow of 250 gallons per minute (946.4 L/min) from the fire department connection to the hydraulically most remote hose connection. Hose connections shall be provided at each of the following locations:
 - 1. Within the mall at the entrance to each *exit passageway* or *corridor*.
 - 2. At each floor-level landing within *interior exit stairways* opening directly on the mall.
 - 3. At exterior public entrances to the mall of a *covered mall building*.
 - 4. At public entrances at the perimeter line of an *open mall building*.
 - 5. At other locations as necessary so that the distance to reach all portions of a tenant space does not exceed 200 feet (60 960 mm) from a hose connection.
- [F] 905.3.4 Stages. Stages greater than 1,000 square feet in area (93 m²) shall be equipped with a Class III wet standpipe system with 1½-inch and 2½-inch (38 mm and 64 mm) hose connections on each side of the stage.
 - **Exception:** Where the building or area is equipped throughout with an *automatic sprinkler system*, a 1½-inch (38 mm) hose connection shall be installed in accordance with NFPA 13 or in accordance with NFPA 14 for Class II or III standpipes.
 - [F] 905.3.4.1 Hose and cabinet. The 1½-inch (38 mm) hose connections shall be equipped with sufficient lengths of 1½-inch (38 mm) hose to provide fire protection for the stage area. Hose connections shall be equipped with an *approved* adjustable fog nozzle and be mounted in a cabinet or on a rack.
- **[F] 905.3.5 Underground buildings.** Underground buildings shall be equipped throughout with a Class I automatic wet or manual wet standpipe system.
- **[F] 905.3.6 Helistops and heliports.** Buildings with a rooftop *helistop* or *heliport* shall be equipped with a Class I or III standpipe system extended to the roof level on which the *helistop* or *heliport* is located in accordance with Section 2007.5 of the <u>Dallas</u> [International] Fire Code.
- **[F] 905.3.7 Marinas and boatyards.** Standpipes in marinas and boatyards shall comply with Chapter 36 of the *Dallas* [*International*] *Fire Code*.

[F] 905.3.8 Landscaped roofs. Buildings or structures that have landscaped roofs and that are equipped with a standpipe system shall have the standpipe system extended to the roof level on which the landscaped roof is located.

905.3.9 Buildings exceeding 10,000 square feet. In buildings exceeding 10,000 square feet (929.03 m²) per story, Class I automatic wet or manual wet standpipes must be provided where any portion of the building's interior area is more than 200 feet (60 960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access.

Exceptions:

- 1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14 where approved by fire code official.
- 2. R-2 occupancies of four stories or less in height having no interior corridors.

905.3.10 Buildings exceeding 500,000 square feet. In buildings exceeding 500,000 square feet (46,451.52 m²) see "Fire Fighter Air Replenishment Systems," Appendix L of the *Dallas Fire Code*."

59. Subsection [F] 905.4, "Location of Class I Standpipe Hose Connections," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:

"[F] 905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

- 1. In every required [interior] exit stairway, a hose connection shall be provided for each story above or below grade plane. Hose connections shall be located at the main floor landing unless otherwise approved by the fire code official.
 - **Exception:** A single hose connection shall be permitted to be installed in the open corridor or open breezeway between open *stairs* that are not greater than 75 feet (22 860 mm) apart.
- 2. On each side of the wall adjacent to the exit opening of a horizontal exit.
 - **Exception:** Where floor areas adjacent to a *horizontal exit* are reachable from an [*interior*] *exit stairway* hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the *horizontal exit*.
- 3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an *exit passageway* are reachable from an [*interior*] *exit stairway* hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the *exit passageway* to other areas of the building.

- 4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit *passageway* or exit *corridor* to the mall. In *open mall buildings*, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit *passageway* or *exit* corridor to the mall.
- 5. Where the roof has a slope less than 4 units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way [a] hose connection [shall be] located to serve the roof or at the highest landing of an [interior] exit stairway with access to the roof provided in accordance with Section 1011.12.
- 6. Where the most remote portion of a nonsprinklered floor or *story* is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or *story* is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in *approved* locations.
- 7. When required by this chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at 200 foot intervals along major corridors thereafter, or as otherwise approved by the fire code official.

[F] 905.4.1 Protection. Risers and laterals of Class I standpipe systems not located within an *interior exit stairway* shall be protected by a degree of *fire resistance* equal to that required for vertical enclosures in the building in which they are located.

Exception: In buildings equipped throughout with an *approved automatic sprinkler system*, laterals that are not located within an *interior exit stairway* are not required to be enclosed within fire-resistance-rated construction.

[F] 905.4.2 Interconnection. In buildings where more than one standpipe is provided, the standpipes shall be interconnected in accordance with NFPA 14.

905.4.3 Additional requirements. All Class I standpipes must be:

- 1. Filled with water at all times; or
- 2. Supervised with a minimum of 10 psig (69 kPA) air pressure with a high/low alarm."

- 60. Subsection [F] 905.8, "Dry Standpipes," of Section 905, "Standpipe systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "905.8 Dry standpipes. Dry standpipes shall not be installed.

Exception: Where subject to freezing and in accordance with NFPA 14. <u>Additionally, manual dry standpipe systems shall be supervised with a minimum of 10 psig and maximum of 40 psig air pressure with a high/low supervisory alarm.</u>

- 61. Subsection [F] 905.9, "Valve Supervision," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- **"905.9 Valve supervision.** Valves controlling water supplies shall be supervised in the open position so that a change in normal position of the valve will generate a supervisory signal at supervising station required by Section 903.4. Where a fire alarm system is provided, a signal shall be transmitted to the control unit.

Exceptions:

- 1. Valves to underground key or hub valves in roadway boxes do not require supervision.
- 2. Valves locked in the normal position and inspected as provided in this code in buildings not equipped with a fire alarm system.

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering."

62. Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended by adding a new Subsection 905.12, "Standpipe Testing," to read as follows:

"905.12 Standpipe testing. Building owners/managers shall use a licensed fire protection contractor to test and certify standpipe systems. In addition to the standpipe systems testing and maintenance requirements of NFPA 25, the following additional requirements shall be applied to the testing that is required every 5 years:

- 1. The piping between the fire department connection (FDC) and the standpipe shall be hydrostatically tested for all FDCs on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
- 2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the contractor shall connect a hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water (at an approved rate and pressure) through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Verify that check valves function properly and that there are no closed control valves on the system.
- 3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25.
- 4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDCs.
- 5. Upon successful completion of standpipe test, the contractor shall place an appropriate service tag as per the State of Texas provisions.
- 6. The contractor shall follow the procedures required by the State of Texas with regard to appropriate tags denoting noncompliance, impairment or any deficiencies noted during the testing, including the required notification of the local authority having jurisdiction.
- 7. Additionally, records of the testing shall be maintained by the owner and contractor, as required by the State of Texas and NFPA 25.
- 8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
- 9. Contact the fire code official for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the fire code official."

- 63. Subsection [F] 906.1, "Where Required," of Section 906, "Portable Fire Extinguishers," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 906.1 Where required. Portable fire extinguishers shall be installed in all of the following locations:
 - 1. In Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

- 1. In Group R-2 occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each dwelling unit is provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C.
- 2. In Group E occupancies, [-] portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each classroom is provided with a portable fire extinguisher having a minimum rating of 2-A:20-B:C.
- [3. In storage areas of Group S Occupancies where forklift, powered industrial truck or powered cart operators are the primary occupants, fixed extinguishers, as specified in NFPA 10, shall not be required where in accordance with all of the following:
 - 3.1 Use of vehicle-mounted extinguishers shall be approved by the fire code official.
 - 3.2 Each vehicle shall be equipped with a 10-pound, 20A:80-B:C extinguisher affixed to the vehicle using a mounting bracket approved by the extinguisher manufacturer or the fire code official for vehicular use.
 - 3.3 Not less than two spare extinguishers of equal or greater rating shall be available on site to replace a discharged extinguisher.
 - 3.4 Vehicle operators shall be trained in the proper operation, use and inspection of extinguishers.
 - 3.5 Inspections of vehicle-mounted extinguishers shall be performed daily.]

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- 2. Within 30 feet (9144 mm) distance of travel from commercial cooking equipment and from domestic cooking equipment in Group I-1; I-2, Condition 1; and R-2 college *dormitory* occupancies.
- 3. In areas where flammable or *combustible liquids* are stored, used or dispensed.
- 4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 3315.1 of the <u>Dallas</u> [International] Fire Code.
- 5. Where required by the <u>Dallas</u> [International] Fire Code section indicated in Table 906.1.
- 6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the fire code official.

Exception: Portable fire extinguishers are not required at normally unmanned Group U occupancy buildings or structures where a portable fire extinguisher suitable to the hazard of the location is provided on the vehicle of visiting personnel."

- 64. Subsection [F] 907.1, "General," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 907.1 General. This section covers the application, installation, performance and maintenance of fire alarm systems and their components. <u>Provisions of the Dallas Fire Code</u> govern in the event of conflicts between this section and the corresponding section of the <u>Dallas Fire Code</u>.
 - **[F] 907.1.1 Construction documents.** Construction documents for fire alarm systems shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code, the <u>Dallas</u> [International] Fire Code, and relevant laws, ordinances, rules and regulations, as determined by the fire code official.
 - **[F] 907.1.2 Fire alarm shop drawings.** Shop drawings for fire alarm systems shall be prepared in accordance with NFPA 72 and submitted for review and approval prior to system installation.
 - **[F] 907.1.3 Equipment.** Systems and components shall be *listed* and *approved* for the purpose for which they are installed. Where such systems are installed, they must be designed, installed and maintained in accordance with this code and the applicable NFPA standards.
 - <u>907.1.3.1 Prohibited equipment.</u> Smoke generating devices activated by a burglar alarm, motion detector, tamper alarm or other type of intruder alarms are prohibited in all buildings.

907.1.4 Design standards. All new or replaced fire alarm systems (including fire alarm control panel replacements) must comply with the requirements of Section 907 and shall be addressable and in accordance with Section 907.6.3. Alarm systems utilizing more than 20 alarm initiating devices shall be analog addressable.

Exception: Existing systems need not comply unless the total building or fire alarm system remodel or expansion initiated after the effective date of this code, as adopted, exceeds 30 percent of the building area. When cumulative building remodel or expansion exceeds 50 percent of the building area, all existing systems shall comply within 18 months of permit application. The owner or operator of the facility shall maintain documentation of the amount of fire alarm system remodel or expansion. The documentation must be submitted with each fire alarm system plan submittal or upon request from the fire code official.

907.1.5 Area separation walls/fire walls. Area separation walls/fire walls must not be used to reduce or eliminate fire alarm requirements.

Exception: Adjacent spaces are considered separate areas for fire alarm purposes if separated by minimum fire-rated construction as required in this code to define separate buildings. Separating walls cannot have openings that permit occupant communication between the spaces."

- 65. Paragraph [F] 907.2.1, "Group A," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
 - "[F] 907.2.1 Group A. A manual fire alarm system and automatic fire detection in paths of egress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies <a href="https://example.com/harmonics.new-en-load

Activation of fire alarm notification appliances must:

- 1. Cause illumination of the *means of egress* with light of not less than 1 foot candle (11 lux) at the walking surface level, and
- 2. Stop any conflicting or confusing sounds and visual distractions.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1, and automatic fire detection in paths of egress, and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

[F] 907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more. Activation of the fire alarm in Group A occupancies with an *occupant load* of 1,000 or more shall initiate a signal using an emergency voice/alarm communications system in accordance with Section 907.5.2.2.

Exception: Where *approved*, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an *approved*, *constantly attended location*.

- **[F] 907.2.1.2 Emergency voice/alarm communication captions.** Stadiums, arenas and *grandstands* required to caption audible public announcements shall be in accordance with Section 907.5.2.2.4."
- 66. Paragraph [F] 907.2.2, "Group B," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
 - "[F] 907.2.2 Group B. A manual fire alarm system, which activates the occupant notification system in accordance with Section 907.5, and automatic fire detection in paths of egress shall be installed in Group B occupancies where one of the following conditions exists:
 - 1. The combined Group B occupant load of all floors is 500 or more.
 - 2. The Group B *occupant load* is more than 100 persons above or below the lowest *level of exit discharge*.
 - 3. The fire area contains an ambulatory care facility.

Exception: Manual fire alarm boxes <u>and automatic fire detection in paths of egress</u> are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

[F] 907.2.2.1 Ambulatory care facilities. Fire areas containing ambulatory care facilities shall be provided with an electronically supervised automatic smoke detection system installed within the ambulatory care facility and in *public use areas* outside of tenant spaces, including public *corridors* and elevator lobbies.

[Exception: Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, provided the occupant notification appliances will activate throughout the notification zones upon sprinkler waterflow.]"

Paragraph [F] 907.2.3, "Group E," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:

"[F] 907.2.3 Group E. A manual fire alarm system and automatic fire detection in paths of egress that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. Group E day care occupancies shall have a smoke detector in all areas used by children. Where automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. Unless separated by a minimum of 100 feet (30 480 mm) of open space, all buildings, whether portable buildings or the main building, will be considered one building for fire alarm occupant load consideration and interconnection of alarm systems.

- 1. A manual fire alarm system with automatic fire detection in paths of egress shall not be required in Group E educational and day care occupancies with an occupant load of 30 [50] or less when provided with an approved automatic sprinkler system.
 - 1.1. Residential in-home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2½ years of age or younger, see Section 907.2.6)
- 2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with *occupant loads* of 100 or less, provided that activation of the manual fire alarm system initiates an *approved* occupant notification signal in accordance with Section 907.5.
- 3. [Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
 - 3.1. Interior corridors are protected by smoke detectors.
 - 3.2. Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.

3.3. Shops and laboratories involving dusts or vapors are protected by *heat detectors* or other *approved* detection devices.

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3.4. Manual activation is provided from normally occupied location.

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- 4.] Manual fire alarm boxes and fire detection in paths of egress shall not be required in Group E educational occupancies where all of the following apply:
 - 3.1 [4.1]. The building is equipped throughout with an *approved automatic* sprinkler system installed in accordance with Section 903.3.1.1.
 - <u>3.2[4.2]</u>. The emergency voice/alarm communication system will activate on sprinkler waterflow.
 - 3.3[4.3]. Manual activation is provided from a normally occupied location.

<u>907.2.3.1 Exterior alarm-signaling device.</u> Alarm-sharing devices must be mounted on the exterior of the building in all common use/gathering areas."

- 68. Paragraph [F] 907.2.6, "Group I," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended by adding a new Subparagraph 907.2.6.4, "Group I-4 Day Care Facilities," to read as follows:
 - "907.2.6.4 Group I-4 day care facilities. A manual fire alarm system and automatic fire detection in paths of egress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I-4 day care facility occupancies. Group I-4 day care facility occupancies shall have smoke detectors in all areas used by children. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system."
- 69. Paragraph [F] 907.2.7, "Group M," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:

"[F] 907.2.7 Group M. A manual fire alarm system and an automatic fire protection system in paths of ingress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group M occupancies where one of the following conditions exists:

- 1. The combined Group M occupant load of all floors is 500 or more persons.
- 2. The Group M *occupant load* is more than 100 persons above or below the lowest *level of exit discharge*.

Exceptions:

- 1. A manual fire alarm system is not required in *covered or open mall buildings* complying with Section 402.
- 2. Manual fire alarm boxes and an automatic fire detection system in paths of egress are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 and the occupant notification appliances will automatically activate throughout the notification zones upon sprinkler waterflow.

[F] 907.2.7.1 Occupant notification. During times that the building is occupied, the initiation of a signal from a manual fire alarm box, [ex] from a waterflow switch or automatic fire detection system shall not be required to activate the alarm notification appliances when an alarm signal is activated at a constantly attended location from which evacuation instructions shall be initiated over an emergency voice/alarm communication system installed in accordance with Section 907.5.2.2."

70. Paragraph [F] 907.2.10, "Group S," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:

"[F] 907.2.10 Group S. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group S public- and self-storage occupancies [three stories or greater in height] for interior corridors and interior common areas. Visible notification appliances are not required within storage units.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow."

- 71. Paragraph [F] 907.2.13, "High-Rise Buildings," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 907.2.13 High-rise buildings. [High-rise] B[b]uildings with a floor used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access shall be provided with an automatic smoke detection/fire alarm system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

- 1. Airport traffic control towers in accordance with Sections 412 and 907.2.22.
- 2. Open parking garages in accordance with Section 406.5.
- 3. Open air portions of b[B]uildings with an occupancy in Group A-5 in accordance with Section 303.6, however this exception does not apply to enclosed concourses or accessory use areas including, but not limited to, skyboxes, restaurants and similarly enclosed areas [303.1].
- 4. Low-hazard special occupancies in accordance with Section 503.1.1.
- 5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.
- 6. In Group I-1 and I-2 occupancies, the alarm shall sound at a *constantly attended location* and occupant notification shall be broadcast by the emergency voice/alarm communication system.
- **[F] 907.2.13.1 Automatic smoke detection.** Automatic smoke detection in high-rise buildings shall be in accordance with Sections 907.2.13.1.1 and 907.2.13.1.2.
 - [F] 907.2.13.1.1 Area smoke detection. Area smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall activate the emergency voice/alarm communication system in accordance with Section 907.5.2.2. In addition to smoke detectors required by Sections 907.2.1 through 907.2.9, smoke detectors shall be located as follows:
 - 1. In each mechanical equipment, electrical transformer, telephone equipment or similar room which is not provided with sprinkler protection.

- 2. In each elevator machine room, machinery room, control room and control space and in elevator lobbies.
- 3. In all interior corridors serving as a means of egress for an occupant load of 10 or more in Group R-1 and R-2 occupancies.

[M] 907.2.13.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located [as follows:

- 1.] i[I]n the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m³/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet and per NFPA 72.

 The actuation of any such detector must shut down the affected air-handling units or operate dampers to prevent the recirculation of smoke. Controls allowing the manual restarting of air-handling equipment during an alarm condition must be provided.
- [2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air inlet openings.]
- [F] 907.2.13.2 Fire department communication system. Where a wired communication system is approved in lieu of an in-building two-way emergency responder communication coverage system in accordance with Section 510 of the <u>Dallas</u> [International] Fire Code, the wired fire department communication system shall be designed and installed in accordance with NFPA 72 and shall operate between a fire command center complying with Section 911, elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside interior exit stairways. The fire department communication device shall be provided at each floor level within the interior exit stairway. The wired communication system and required appurtenances shall be maintained in an operable condition at all times."
- 72. Paragraph [F] 907.4.2, "Manual Fire Alarm Boxes," of Subsection [F] 907.4, "Initiating Devices," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 907.4.2 Manual fire alarm boxes. Where a manual fire alarm system is required by another section of this code, it shall be activated by fire alarm boxes installed in accordance with Sections 907.4.2.1 through 907.4.2.6. Manual fire alarm actuating devices must be an approved double action type.

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- **[F] 907.4.2.1 Location.** Manual fire alarm boxes shall be located not more than 5 feet (1524 mm) from the entrance to each *exit*. In buildings not protected by an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, additional manual fire alarm boxes shall be located so that the distance of travel to the nearest box does not exceed 200 feet (60 960 mm).
- **[F] 907.4.2.2 Height.** The height of the manual fire alarm boxes shall be not less than 42 inches (1067 mm) and not more than 48 inches (1372 mm) measured vertically, from the floor level to the activating handle or lever of the box.
- [F] 907.4.2.3 Color. Manual fire alarm boxes shall be red in color.

Exception: Other colors may be acceptable if red does not provide a contrast with the surrounding background, when approved by the fire code official.

[F] 907.4.2.4 Signs. Where <u>approved existing</u> fire alarm systems are not monitored by an *approved* supervising station in accordance with Section 907.6.6, an *approved* permanent sign shall be installed adjacent to each manual fire alarm box that reads: WHEN ALARM SOUNDS CALL FIRE DEPARTMENT.

Exception: Where the manufacturer has permanently provided this information on the manual fire alarm box.

- **[F]907.4.2.5 Protective covers.** The fire code official is authorized to require the installation of *listed* manual fire alarm box protective covers to prevent malicious false alarms or to provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. A protective cover that emits a local *alarm signal* shall not be installed unless *approved* by the fire code official. Protective covers shall not project more than that permitted by Section 1003.3.3.
- [F] 907.4.2.6 Unobstructed and unobscured. Manual fire alarm boxes shall be accessible, unobstructed, unobscured and visible at all times."
- 73. Subparagraph [F] 907.5.2.2, "Emergency Voice/Alarm Communication Systems," of Paragraph [F] 907.5.2, "Alarm Notification Appliances," of Subsection [F] 907.5, "Occupant Notification," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:

"[F] 907.5.2.2 Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404 of the <u>Dallas</u> [International] Fire Code. In high-rise buildings, the system shall operate on at least the alarming floor, the floor above and the floor below and identify on an annunciator the zone or address from which the alarm signal originated. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

- 1. Elevator groups.
- 2. Interior exit stairways.
- 3. Each floor.
- 4. Areas of refuge as defined in Chapter 2.

Exception: In Group I-1 and I-2 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

- **[F] 907.5.2.2.1 Manual override.** A manual override for emergency voice communication shall be provided on a selective and all-call basis for all paging zones.
- **[F] 907.5.2.2.2 Live voice messages.** The emergency voice/alarm communication system shall have the capability to broadcast live voice messages by paging zones on a selective and all-call basis.
- **[F] 907.5.2.2.3 Alternate uses.** The emergency voice/alarm communication system shall be allowed to be used for other announcements, provided that the manual fire alarm use takes precedence over any other use.
- **[F] 907.5.2.2.4** Emergency voice/alarm communication captions. Where stadiums, arenas and grandstands have 15,000 fixed seats or more and provide audible public announcements, the emergency/voice alarm communication system shall provide prerecorded or real-time captions. Prerecorded or live emergency captions shall be from an *approved* location constantly attended by personnel trained to respond to an emergency.
- **[F] 907.5.2.2.5 Standby power.** Emergency voice/alarm communications systems shall be provided with standby power in accordance with Section 2702."

- 74. Subparagraph [F] 907.5.2.3, "Visible Alarms," of Paragraph [F] 907.5.2, "Alarm Notification Appliances," of Subsection [F] 907.5, "Occupant Notification Systems," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
 - "[F] 907.5.2.3 Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3. <u>Visual alarm notification appliances must be provided where an existing fire alarm system is upgraded, altered or a new fire alarm system is installed.</u>

- Visible alarm notification appliances are not required in <u>storage areas of Group S</u> <u>occupancies</u> [alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed].
- 2. Visible alarm notification appliances shall not be required in *exits* as defined in Chapter 2.
- 3. Visible alarm notification appliances shall not be required in elevator cars.
- 4. Visual alarm notification appliances are not required in critical care areas of Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
- 5. A visible *alarm notification appliance* installed in a nurses' control station or other continuously attended staff location in a Group I-2, Condition 2 suite shall be an acceptable alternative to the installation of visible alarm notification appliances throughout the suite or unit in Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
- **[F] 907.5.2.3.1 Public use areas and common use areas.** Visible alarm notification appliances shall be provided in *public use areas* and *common use areas*.

Exception: Where *employee work areas* have audible alarm coverage, the notification appliance circuits serving the *employee work areas* shall be initially designed with not less than 20-precent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing- impaired employee(s).

- **[F] 907.5.2.3.2 Groups I-1 and R-1.** *Habitable spaces* in *dwelling units* and *sleeping units* in Group I-1 and R-1 occupancies in accordance with Table 907.5.2.3.2 shall be provided with visible alarm notification. Visible alarms shall be activated by the in-room smoke alarm and the building fire alarm system.
- **[F] 907.5.2.3.3 Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, each *story* that contains *dwelling units* and *sleeping units* shall be provided with the capability to support futurebvisible alarm notification appliances in accordance with Chapter 11 of ICC A117.1. Such capability shall accommodate wired or wireless equipment.
 - **[F] 907.5.2.3.3.1 Wired equipment.** Where wired equipment is used to comply with the future capability required by Section 907.5.2.3.3, the system shall include one of the following capabilities:
 - 1. The replacement of audible appliances with combination audible/visible appliances or additional visible notification appliances.
 - 2. The future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances.
 - 3. For wired equipment, the fire alarm power supply and circuits shall have not less than 5-percent excess capacity to accommodate the future addition of visible alarm notification appliances, and a single access point to such circuits shall be available on every story. Such circuits shall not be required to be extended beyond a single access point on a story. The fire alarm system shop drawings required by Section 907.1.2 shall include the power supply and circuit documentation to accommodate the future addition of visible notification appliances.
- 907.5.2.3.4 Notification alarm continuation. Fire alarm systems shall be programmed non-silence-able for all extinguishing and suppression systems. Visible notification appliances shall continue to operate until the fire alarm system has been cleared and reset."
- 75. Paragraph [F] 907.6.1, "Wiring," of Subsection [F] 907.6, "Installation and Monitoring," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended by to read as follows:
 - "[F] 907.6.1 Wiring. Wiring shall comply with the requirements of NFPA 70 and NFPA 72. Wireless protection systems utilizing radio-frequency transmitting devices shall comply with the special requirements for supervision of low-power wireless systems in NFPA 72.

607.6.1.1 Installation. All fire alarm systems must be installed in such a manner that the failure of any single alarm initiating device or a single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All initiating circuit conductors must be Class "A" or Class "X" wired with a minimum of 6 feet of horizontal and vertical separation between supply and return circuit conductors. All fire alarm systems must be wired as follows: IDC – Class A style or Class "X" style – D; SLC – Class A or Class "X" style 6; NAC Class B.

Exception: The IDC from an addressable device used to monitor the status of a suppression system and duct detectors may be wired Class B, Style B provided the addressable device is located within 10 feet of the suppression system device.

907.6.1.2 Support. Fire alarm system wiring and cables shall be independently supported using guide wires and anchors that are attached to the building structure.

Exception: Independent support wires may be attached to the ceiling grid for stabilization only.

- 907.6.1.3 Identification. All fire alarm system guide wire shall be painted red or labeled "Fire Alarm Only." All fire alarm wiring junction boxes shall be labeled "Fire Alarm Use." All fire alarm circuits shall be identified at terminal and junction boxes.
- **907.6.1.4 Inspection.** All fire alarm system wiring installations shall be inspected by the fire code official for compliance with the requirements of this code, NFPA 70 and NFPA 72.
- 907.6.1.5 Surge protection. In addition to any built-in surge protection of the fire alarm panel, each fire alarm panel and power supply panel shall have an added surge protector installed. The secondary surge protection device must be installed in a manner that it is isolated a minimum of two feet from the panel as measured along the route of electrical travel. If data lines run between separate buildings, data line surge/spike protection is required on each data line where the line enters and/or exits each building."
- 76. Paragraph [F] 907.6.3, "Initiating Device Identification," of Subsection [F] 907.6, "Installation and Monitoring," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "907.6.3 Initiating device identification. <u>All new or replacement [The]</u> fire alarm systems shall identify the specific *initiating device* address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate. <u>Alarms shall not be permitted to be transmitted as a general alarm or zone</u> condition.

- 1. Fire alarm systems in single-*story* buildings less than 22,500 square feet (2090 m²) in area where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.3.1.1.
- 2. Fire alarm systems that only include [manual fire alarm boxes, waterflow initiating devices and] not more than 10 additional alarm-initiating devices.
- [3. Special initiating devices that do not support individual device identification.
- 4. Fire alarm systems or devices that are replacing existing equipment.]

[F] 907.6.3.1 Annunciation. The *initiating device* status shall be annunciated at an *approved* onsite location.

77. Paragraph [F] 907.6.6, "Monitoring," of Subsection [F] 907.6, "Installation and Monitoring," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:

"[F] 907.6.6 Monitoring. Fire alarm systems required by this chapter, by other chapters of this code, or by the <u>Dallas</u> [<u>International</u>] Fire Code shall <u>transmit device identification in accordance with Section 907.6.3 to [be monitored by]</u> an approved central station, remote supervising station, or proprietary supervising station as defined in [accordance with] NFPA 72, or a local alarm which gives audible and visual signals at a constantly attended location. A constantly attended location is defined as being occupied by 2 or more persons whose responsibility it is to monitor the fire alarm system.

Exception: Monitoring by a supervising station is not required for:

- 1. Single- and multiple-station smoke alarms required by Section 907.2.11.
- 2. Smoke detectors in Group I-3 occupancies.
- 3. Automatic sprinkler systems in one- and two-family dwellings.

[F] 907.6.6.1 Transmission of alarm signals. Termination of alarm signals to a supervising station shall be in accordance with NFPA 72.

[F] 907.6.6.2 MIY Monitoring. Direct transmission of alarms associated with monitor it yourself (MIY) transmitters to a public safety answering point (PSAP) shall not be permitted unless approved by the *fire code official*.

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- **[F] 907.6.6.3 Termination of monitoring service.** Termination of fire alarm monitoring services shall be in accordance with Section 901.9 of the <u>Dallas</u> [International] Fire Code.
- 907.6.6.4 Communication requirements. All alarm systems, new or replacement, shall transmit alarm, supervisory and trouble signals descriptively to the approved central station, remote supervisory station or proprietary supervising station as defined in NFPA 72, with the correct device designation and location of addressable device identification. Alarms shall not be permitted to be transmitted as a general alarm or zone condition."
- 78. Subsection [F] 907.7, "Acceptance Tests and Completion," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 907.7 Acceptance tests and completion. Upon completion of the installation, the fire alarm system and all fire alarm components shall be tested <u>and approved</u> in accordance with NFPA 72 <u>and Section 901.5 of the *Dallas Fire Code*.</u>
 - **[F] 907.7.1 Single- and multiple-station alarm devices.** When the installation of the alarm devices is complete, each device and interconnecting wiring for multiple-station alarm devices shall be tested in accordance with the smoke alarm provisions of NFPA 72.
 - **[F] 907.7.2 Record of completion.** A record of completion in accordance with NFPA 72 verifying that the system has been installed and tested in accordance with the *approved* plans and specifications shall be provided.
 - **[F] 907.7.3 Instructions.** Operating, testing and maintenance instructions and *record drawings* ("asbuilts") and equipment specifications shall be provided at an *approved* location."
- 79. Subsection [F] 910.2, "Where Required," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "**[F] 910.2 Where required.** Smoke and heat vents or a mechanical smoke removal system shall be installed as required by Sections 910.2.1 <u>through 910.2.3</u> [and 910.2.2].

Exceptions:

1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an *approved automatic sprinkler system*.

- 2. Only manual s[S]moke and heat removal shall [not] be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
- 3. Only manual s[S]moke and heat removal shall [not] be required in areas of buildings equipped with control mode special application sprinklers with a response time index of 50(m*S)^{1/2} or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

910.2.1 Group F-1 or S-1. Smoke and heat vents installed in accordance with Section 910.3 or a mechanical smoke removal system installed in accordance with Section 910.4 shall be installed in buildings and portions thereof used as a Group F-1 or S-1 occupancy having more than 50,000 square feet (4645 m²) of undivided area. In occupied portions of a building equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

Exception: Group S-1 aircraft repair hangars.

[F] 910.2.2 High-piled combustible storage. Smoke and heat removal required by Table 3206.2 of the <u>Dallas</u> [International] Fire Code for buildings and portions thereof containing high-piled combustible storage shall be installed in accordance with Section 910.3 in unsprinklered buildings. In buildings and portions thereof containing high-piled combustible storage equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, a smoke and heat removal system shall be installed in accordance with Section 910.3 or 910.4. In occupied portions of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

910.2.3 Group H. Smoke and heat vents or a mechanical smoke removal system shall be installed in buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3 and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials."

- 80. Subsection [F] 910.3, "Smoke and Heat Vents," of Section 910 "Smoke and Heat Removal," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Fire Code is amended by adding a new Paragraph [F] 910.3.4, "Vent Operation," to read as follows:
 - "[F] 910.3.4 Vent operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.2.1 through 910.2.3.

[F] 910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically.

The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100°F (approximately 38°C) greater than the temperature rating of the sprinklers installed.

Exception: Manual only system per Section 910.2.

[F] 910.3.4.2 Nonsprinklered buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (38°C) and 220°F (104°C) above ambient.

Exception: Listed gravity-operated drop out vents."

- 81. Subsection [F] 910.3, "Smoke and Heat Vents," of Section 910 "Smoke and Heat Removal," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Fire Code is amended by adding a new Paragraph [F] 910.3.5, "Fusible Link Temperature Rating," to read as follows:
 - "[F] 910.3.5 Fusible link temperature rating. Where vents are installed in areas provided with automatic fire sprinklers and the vents operate by fusible link, the fusible link shall have a temperature rating of 360°F (182°C)."

- 82. Subparagraph 910.4.3.1, "Makeup Air,' of Paragraph 910.4.3, "System Design Criteria," of Subsection [F] 910.4, "Mechanical Smoke Removal Systems," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Fire Code is amended to read as follows:
 - "910.4.3.1 Makeup air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be [manual or] automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust."
- 83. Paragraph 910.4.4, "Activation," of Subsection [F] 910.4, "Mechanical Smoke Removal Systems," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Fire Code is amended to read as follows:
 - "910.4.4 Activation. The mechanical smoke removal system shall be activated <u>automatically</u> by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided [only].

Exception: Manual only systems per Section 910.2."

- 84. Subsection [F] 912.2, "Location," of Section 912, "Fire Department Connections," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 912.2 Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. Fire apparatus access roads shall be required within 50 feet (15 240 mm) of any fire department hose connections. A [The location of] fire department hose connection[s] shall be located within 400 feet (122 m) of a fire hydrant and approved by the fire code official.
 - **[F] 912.2.1 Visible location.** Fire department connections shall be located on the street side of buildings or facing approved fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access or as otherwise approved by the *fire code official*.

- [F] 912.2.2 Existing buildings. On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an *approved* sign mounted on the street front or on the side of the building. Such sign shall have the letters "FDC" not less than 6 inches (152 mm) high and words in letters not less than 2 inches (51 mm) high or an arrow to indicate the location. Such signs shall be subject to the approval of the *fire code official*.
- 912.2.3 Remote and free-standing fire department connections. Free-standing fire department connections shall be internally and externally galvanized, permanently marked with the address being served, or portion thereof, and provided with approved locking caps/covers. Means to service the drain/check valve shall be provided."
- 85. Subsection [F] 913.1, "General," of Section 913, "Fire Pumps," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 913.1 General. Where provided, fire pumps shall be installed in accordance with this section and NFPA 20. When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 feet in width and 6 feet 8 inches in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1 of the *Dallas Fire Code*.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the *fire code official*. Access keys shall be provided in the key box as required by Section 506.1 of the *Dallas Fire Code*."

- 86. Subsection [F] 913.4, "Valve Supervision," of Section 913, "Fire Pumps," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended to read as follows:
- "[F] 913.4 Valve supervision. Where provided, the fire pump suction, discharge and bypass valves, and isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods:
 - 1. Central-station, proprietary or remote-station signaling service.
 - 2. Local signaling service that will cause the sounding of an audible signal at a *constantly attended location*.

- 3. Locking valves open when approved by the fire code official.
- 4. Sealing of valves and *approved* weekly recorded inspection where valves are located within fenced enclosures under the control of the owner when approved by the *fire code official*.

[F] 913.4.1 Test outlet valve supervision. Fire pump test outlet valves shall be supervised in the closed position."

- 87. Section 913, "Fire Pumps," of Chapter 9, "Fire Protection and Life Safety Systems," of the 2021 International Building Code is amended by adding a new Subsection [F] 913.6, "Pump Supervision," to read as follows:
- "[F] 913.6 Pump supervision. Where the pump room is not constantly attended, the fire pump shall transmit a supervisory signal to indicate loss of power, phase reversal and pump running conditions in accordance with NFPA 20."
- 88. Subsection 1001.1, "General," of Section 1001, "Administration," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1001.1 General. Buildings or portions thereof shall be provided with a *means of egress* system as required by this chapter. The provisions of this chapter shall control the design, construction and arrangement of *means of egress* components required to provide an *approved means of egress* from structures and portions thereof. Provisions of this *code* shall govern in the event of conflicts between this chapter and the corresponding chapter of the *Dallas Fire Code*."
- 89. Paragraph 1004.5, "Areas Without Fixed Seating," of Section 1004, "Occupant Load," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1004.5 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.5 For areas without *fixed seating*, the *occupant load* shall be not less than that number determined by dividing the floor area under consideration by the *occupant load* factor assigned to the function of the space as set forth in Table 1004.5 Where an intended function is not *listed* in Table 1004.5, the *building official* shall establish a function based on a *listed* function that most nearly resembles the intended function.

Exception: Where *approved* by the *building official*, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design *occupant load*."

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- 90. Subsection 1004.7, "Outdoor Areas," of Section 1004, "Occupant Load," of Chapter
- 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1004.7 Outdoor areas. Yards, patios, occupied roofs, courts and similar outdoor areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

- 1. Outdoor areas used exclusively for service of the building need only have one *means of egress*.
- 2. The occupant load of the outdoor area need not be added to the building's total occupant load if:
 - 2.1 The [Both] outdoor areas are located at grade and associated with Group R-3 and individual dwelling units of Group R-2. Means of egress must be provided from the outdoor area in accordance with this chapter.
 - 2.2 The outdoor areas are not located at grade and associated with Group R-3 and individual dwelling units of Group R-2 and the outdoor area occupies not more than 10 percent of the area of the dwelling unit of a nonsprinklered building or not less more than 20 percent of the area of the dwelling unit of a building provided throughout with an approved automatic sprinkler system. Means of egress must be provided from the outdoor area in accordance with this chapter."
- 91. Paragraph 1006.2.1, "Egress Based on Occupant Load and Common Path of Egress Travel Distance," of Subsection 1006.2, "Egress From Spaces," of Section 1006, "Number of Exits and Exit Access Doorways," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
 - "1006.2.1 Egress based on occupant load and common path of egress travel distance. Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1. The cumulative occupant load from adjacent rooms, areas or spaces shall be determined in accordance with Section 1004.2.

- 1. The number of *exits* from foyers, lobbies, vestibules, or similar spaces need not be based on cumulative *occupant loads* for areas discharging through such spaces, but the capacity of the *exits* from such spaces shall be based on applicable cumulative *occupant loads*.
- 2. Care suites in Group I-2 occupancies complying with Section 407.4.
- 3. Unoccupied <u>rooftop</u> mechanical rooms and *penthouses* are not required to comply with the common path of egress travel distance measurement.
- **1006.2.1.1** Three or more exits or exit access doorways. Three exits or exit access doorways shall be provided for any space with an occupant load of 501 to 1,000. Four exits or exit access doorways shall be provided from any space with an occupant load greater than 1,000."
- 92. Table 1006.2.1, "Spaces With One Exit or Exit Access Doorway," of Paragraph 1006.2.1, "Egress Based on Occupant Load and Common Path of Egress Travel Distance," of Subsection 1006.2, "Egress From Spaces," of Section 1006, "Number of Exits and Exit Access Doorways," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:

"TABLE 1006.2.1

SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY

OCCUPANCY	MAXIMUM OCCUPANT LOAD OF SPACE	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (feet) h				
					Without Sprinkler System (feet) Occupant Load	
		OL ≤ 30	OL > 30			
		A ^c , E, M	49	75	75	75ª
		В	49	100	75	100a
F	49	75	75	100a		
H-1, H-2, H-3	3	NP	NP	25 ^b		
H-4, H-5	10	NP	NP	75 ^b		
I-1, I-2 ^d , I-4	10	NP	NP	75ª		
[-3	10	NP	NP	100ª		
R-1	10	NP	NP	75ª		
R-2	20	NP	NP	125ª		
R-3 ^e	20	NP	NP	125ª, g		
R-4 ^e	20	NP	NP	125ª, g		
Sf	29	100	75	100ª		
U	49	100	75	75ª		

For SI: 1 foot = 304.8 mm.

NP = Not Permitted

- a. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.
- b. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.
- c. For a room or space used for assembly purposes having fixed seating, see Section 1030.8.
- d. For the travel distance limitations in Group I-2, see Section 407.4.
- e. The common path of egress travel distance shall only apply in a Group R-3 occupancy located in a mixed occupancy building.
- f. The length of common path of egress travel distance in a Group S-2 open parking garage shall be not more than 100 feet.
- g. For the travel distance limitations in Groups R-3 and R-4 equipped throughout with an automatic sprinkler Amend Chapter 53 (adopt 2021 International Building Code) Page 91

- system in accordance with Section 903.3.1.3, see Section 1006.2.2.6.
- h. Not applicable to single-family and duplex uses as defined in the Dallas Development Code or to townhome and multiple building townhouse structures."
- 93. Paragraph 1006.2.2, "Egress Based on Use," of Subsection 1006.2, "Egress From Spaces," of Section 1006, "Number of Exits and Exit Access Doorways," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended by adding a new Subparagraph 1006.2.2.7, "Day Care Means of Egress," to read as follows:
 - "1006.2.2.7 Day care means of egress Day care facilities, rooms or spaces where care is provided for more than 10 that are 2 ½ years of age or less shall have access to not less than two exits or exit access doorways. Rooms normally occupied by prekindergarten, kindergarten, or first grade students shall be located in accordance with Section 504 of this code."
- 94. Paragraph 1007.1.1, "Two Exits or Exit Access Doorways," of Subsection 1007.1 "General," of Section 1007, "Exit or Exit Access Doorway Configuration," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
 - "1007.1.1 Two exits or exit access doorways. Where two exits, exit access doorways, exit access stairways or ramps, or any combination thereof, are required from any portion of the exit access, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between them. Interlocking or scissor stairways shall be counted as one exit stairway.

- 1. Where interior *exit stairways* or *ramps* are interconnected by a 1-hour fire-resistance-rated *corridor* conforming to the requirements of Section 1020, the required exit separation shall be measured along the shortest direct line of travel within the corridor.
- 2. Where a building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, the separation distance shall be not less than one-third (1/3) of the length of the maximum overall diagonal dimension of the area served.
- 3. Interlocking or scissor *stairways* are permitted to be counted as two *exits* if all of the following conditions are met:
 - 3.1. The building is not a *high-rise*.

- 3.2. The distance between exit doors complies with Section 1007.1.
- 3.3. The building is equipped throughout with an *automatic sprinkler system* in accordance with the Section 903.3.1.1.
- 3.4. Each stairway is separated from each other and from the remainder of the building by construction having a fire-resistance rating of not less than 2 hours with no openings or penetrations between the stairways other than those for standpipes and automatic sprinkler systems. The separation between the stairways is permitted to be constructed as a single wall.
- 3.5. Each *exit* meets all of the requirements in Section 1023 including the smokeproof enclosure provisions of Section 909.20.
- **1007.1.1.1 Measurement point.** The separation distance required in Section 1007.1.1 shall be measured in accordance with the following:
 - 1. The separation distance to *exit* or *exit access doorways* shall be measured to any point along the width of the doorway.
 - 2. The separation distance to *exit access stairways* shall be measured to the closest riser.
 - 3. The separation distance to *exit access ramps* shall be measured to the start of the ramp run."
- 95. Paragraph 1007.1.3 "Remoteness of Exit Access Stairways or Ramps," of Subsection 1007.1, "General," of Section 1007, "Exit or Exit Access Doorway Configuration," of Subchapter 10, "Means of Egress," of 2021 International Building Code is amended by adding a new Subparagraph 1007.1.3.2, "Interlocking Stairs When Allowed as Separate Exits with Three or More Exits or Exit Access Doorways," to read as follows:
 - "1007.1.3.2 Interlocking stairs when allowed as separate exits with three or more exits or exit access doorways. Where access to three or more exits is required, not less than two exit or exit access doorways shall be arranged in accordance with the provisions of Section 1007.1.1. Additional required exit or exit access doorways shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available. In addition, the interlocking stairs exit doorways terminating at the exit discharge shall be arranged a reasonable distance apart equivalent to the exit separation required in Section 1007.1.1 and the smokeproof enclosure requirements."

- 96. Subsection 1009.1, "Accessible Means of Egress Required," of Section 1009, "Accessible Means of Egress," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1009.1 Accessible means of egress required. Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress is required by Section 1006.2 or 1006.3 from any accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

- 1. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1009.3, 1009.4 or 1009.5.
- 2. In assembly areas with ramped *aisles* or stepped *aisles*, one *accessible means of egress* is permitted where the *common path of egress travel* is *accessible* and meets the requirements in Section 1030.8.
- 3. Accessible means of egress may satisfy this section if designed in accordance with Article 9102, "Architectural Barriers," of Vernon's Texas Civil Statutes and the "Texas Accessibility Standards of the Architectural Barriers Act," adopted by the Texas Commission on Licensing and Regulation and built in accordance with a state certified plan, including any variances or waivers granted by the state."
- 97. Subsection 1009.5, "Platform Lifts," of Section 1009, "Accessible Means of Egress," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1009.5 Platform lifts. Platform (wheelchair) lifts shall be permitted to serve as part of an *accessible means of egress* where allowed as part of a required *accessible route* in Section 1110.9 except for Item 10. Standby power for the platform lift shall be provided in accordance with Chapter 27.
 - 1009.5.1 Openness. Platform lifts on an accessible means of egress shall not be installed in a hoistway as defined in ASME A17.1."
- 98. Subsection 1010.1, "General," of Section 1010, "Doors, Gates and Turnstiles," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:

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"1010.1 General. Doors in the *means of egress* shall comply with the requirements of Sections 1010.1.1 through 1010.3.4. Exterior *exit* doors shall also comply with the requirements of Section 1022.2. Gates in the *means of egress* shall comply with the requirements of Section 1010.4 and 1010.4.1. Turnstiles in the *means of egress* shall comply with the requirements of Sections 1010.5 through 1010.5.4.

Doors, gates and turnstiles provided for egress purposes in numbers greater than required by this code shall comply with the requirements of this section.

Doors in the *means of egress* shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on *means of egress* doors. *Means of egress* doors shall not be concealed by curtains, drapes, decorations or similar materials.

Security and electronic locking devices affecting *means of egress* shall be subject to approval by the building official and subject to inspections by the fire code official.

1010.1.1 Size of doors. The required capacity of each door opening shall be sufficient for the occupant load thereof and shall provide a minimum clear opening width of 32 inches (813 mm). The clear opening width of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear opening width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a minimum clear opening width of 32 inches (813 mm). In Group I-2, doors serving as means of egress doors where used for the movement of beds shall provide a minimum clear opening width of 41½ inches (1054 mm). The minimum clear opening height of doors shall be not less than 80 inches (2032 mm).

- 1. In Group R-2 and R-3 dwelling and sleeping units that are not required to be an Accessible unit, Type A unit or Type B unit, the minimum width shall not apply to door openings that are not part of the required means of egress.
- 2. In Group I-3, door openings to resident *sleeping units* that are not required to be an *Accessible unit* shall have a minimum clear opening width of not less than 28 inches (711 mm).
- 3. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum clear opening width.
- 4. The maximum width of door leaves in revolving doors that comply with Section 1010.3.1 shall not be limited.
- 5. The maximum width of door leaves in *power operated doors* that comply with Section 1010.3.2 shall not be limited.

- 6. Door openings within a *dwelling unit* or *sleeping unit* shall not have a minimum clear height of 78 inches (1981 mm).
- 7. In *dwelling* and *sleeping units* that are not required to be *Accessible*, Type A or Type B units, exterior door openings other than the required *exit* door shall have a minimum clear opening height of 76 inches (1930 mm).
- 8. In Groups I-1, R-2, R-3 and R-4, in *dwelling and sleeping units* that are not required to be Accessible, Type A or *Type B units*, the minimum clear opening widths shall not apply to interior egress doors.
- 9. Door openings required to be *accessible* within *Type B units* intended for uses passage shall have a minimum clear opening width of 31.75 inches (806 mm).
- 10. Doors to walk-in freezers and coolers less than 1,000 square feet (93 m²) in area shall have a maximum width of 60 inches (1524 mm) nominal.
- 11. Doors serving nonaccessible single-user shower or sauna compartments, toilet stalls or dressing, fitting or changing rooms shall have a minimum clear opening width of 20 inches (508 mm).
- **1010.1.1.1 Projections into clear opening.** There shall not be projections into the required clear opening width lower than 34 inches (864 mm) above the floor or ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the floor or ground shall not exceed 4 inches (102 mm).

Exception: Door closers, overhead door stops, power door operators, and electromagnetic door locks shall be permitted to be 78 inches (1980 mm) minimum above the floor.

1010.1.2 Egress door types. Egress doors shall be of side-hinged, swinging door, pivoted door, or *balanced door* types.

- 1. *Private garages*, office areas, factory and storage areas with an *occupant load* of 10 or less.
- 2. Group I-3 occupancies used as a place of detention.
- 3. Critical or intensive care patient rooms within suites of health care facilities.
- 4. Doors within or serving a single *dwelling unit* in Groups R-2 and R-3.
- 5. In other than Group H occupancies, revolving doors complying with Section 1010.3.1. Amend Chapter 53 (adopt 2021 International Building Code) Page 96

- 6. In other than Group H occupancies, special purpose horizontal sliding, accordion or folding door assemblies complying with Section 1010.3.3.
- 7. Power-operated doors in accordance with Section 1010.3.2.
- 8. Doors serving a bathroom within an individual *sleeping unit* in Group R-1.
- 9. In other than Group H occupancies, manually operated horizontal sliding doors are permitted in a *means of egress* from spaces with an *occupant load* of 10 or less.
- **1010.1.2.1 Direction of swing.** Side-hinged swinging doors, pivoted doors and balanced doors shall swing in the direction of egress travel where serving a room or area containing an *occupant* load of 50 or more persons or a Group H occupancy.

1010.1.3 Forces to unlatch and open doors. The forces to unlatch doors shall comply with the following:

- 1. Where door hardware operates by push or pull, the operational force to unlatch the door shall not exceed 15 pounds (67 N).
- 2. Where door hardware operates by rotation, the operational force to unlatch the door shall not exceed 28 inch-pounds (315 N-cm).

The force to open doors shall comply with the following:

- 1. For interior swinging egress doors that are manually operated, other than doors required to be fire rated, the force for pushing or pulling open the door shall not exceed 5 pounds (22 N).
- 2. For other swinging doors, sliding doors or folding doors, and doors required to be fire rated, the door shall require not more than a 30-pound (133 N) force to be set in motion and shall move to a full-open position when subjected to not more than a 15-pound (67 N) force.
- **1010.1.3.1 Location of applied forces.** Forces shall be applied to the latch side of the door.
- **1010.1.3.2 Manual horizontal sliding doors.** Where a manual horizontal sliding door is required to latch, the latch or other mechanism shall prevent the door from rebounding into a partially open position when the door is closed.
- **1010.1.4 Floor elevation.** There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent slope).

- 1. At doors serving individual dwelling units or sleeping units in Groups R-2 and R-3 [‡] a door is permitted to open at the top step of an interior *flight* of stairs, provided that the door does not swing over the top step.
- 2. At exterior doors serving Groups F, H, R-2 and S and where such doors are not part of an accessible route, the landing at an exterior door shall not be more than 7 inches (178 mm) below the landing on the egress side of the door, provided that the door, other than an exterior storm or screen door, does not swing over the landing.
- 3. At exterior doors serving Group U and individual dwelling units and sleeping units in Groups R-2 and R-3, and where such units are not required to be Accessible units, Type A units or Type B units, the landing at an exterior doorway shall be not more than 7¾ inches (197 mm) below the landing on the egress side of the door. Such doors, including storm or screen doors, shall be permitted to swing over either landing.
- 4. Variations in elevation due to differences in finish materials, but not more than $\frac{1}{2}$ inch (12.7 mm).
- 5. Exterior decks, patios or balconies that are part of Type B *dwelling units or sleeping units*, that have impervious surfaces and that are not more than 4 inches (102 mm) below the finished floor level of the adjacent interior space of the *dwelling unit* or *sleeping unit*.
- 6. Doors serving equipment spaces not required to be *accessible* in accordance with Section 1103.2.9 and serving an *occupant load* of five or less shall be permitted to have a landing on one side to be not more than 7 inches (178 mm) above or below the landing on the egress side of the door.

1010.1.5 Landings at doors. Landings shall have a width not less than the width of the *stairway* or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). When a landing serves an *occupant load* of 50 or more, doors in any position shall not reduce the landing to less than one-half its required width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

Exception: Landing length in the direction of travel in Groups R-3 and U and within individual units of Group R-2 need not exceed 36 inches (914 mm).

1010.1.6 Thresholds. Thresholds at doorways shall not exceed \(^3\)/4 inch (19.1 mm) in height above the finished floor or landing for sliding doors serving dwelling units or \(^1\)/2 inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than \(^1\)/4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

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- 1. In occupancy Group R-2 or R-3, threshold heights for sliding and side-hinged exterior doors shall be permitted to be up to 7¾ inches (197 mm) in height if all of the following apply:
 - 1.1. The door is not part of the required *means of egress*.
 - 1.2. The door is not part of an *accessible route* as required by Chapter 11.
 - 1.3. The door is not part of and Accessible unit, Type A unit or Type B unit.
- 2. In *Type B units*, where Exception 5 to Section 1010.1.4 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 4½ inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 4½ inches (114 mm) above the exterior deck, patio or balcony for other doors.

1010.1.7 Door arrangement. Space between two doors in a series shall be 48 inches (1219 mm) minimum plus the width of a door swinging into the space. Doors in a series shall swing either in the same direction or away from the space between the doors.

- 1. The minimum distance between horizontal sliding power-operated doors in a series shall be 48 inches (1219 mm).
- 2. Storm and screen doors serving individual *dwelling units* in Groups R-2 and R-3 need not be spaced 48 inches (1219 mm) from the other door.
- 3. Doors within individual *dwelling units* in Groups R-2 and R-3 other than within Type A *dwelling units*."
- 99. Paragraph 1010.2.11, "Door Hardware Release of Electrically Locked Egress Doors," of Subsection 1010.2, "Door Operations," of Section 1010, "Doors, Gates and Turnstiles," of Chapter 10, "Means of Egress," of the 2021 International Building Code is deleted and replaced with a new Paragraph 1010.2.11, "Door Hardware Release of Electrically Locked Egress Doors," to read as follows:

"1010.2.11 Door hardware release of electrically locked egress doors. Doors in all occupancies are permitted to be equipped with approved, listed electronic locks which must be installed in accordance with this section if the building is protected throughout with an *automatic sprinkler system*, a fire alarm system, a smoke detection system or with UL 268 smoke detectors installed on each interior side of all doors provided with electronic locks. The locking system units shall be listed in accordance with UL 294.

Exception: Electronic strikes or electronic mortise locks that do not impede egress are not subject to these requirements.

1010.2.11.1 Ability to exit. Regardless of the location of the device or the level of security desired, the ability to exit at the option of the individual, not the controlling authority, must always be provided.

Exceptions:

- 1. Locations for occupants needing self-protection because of reduced mental capacities such as mental or Alzheimer care hospitals may have release mechanisms as further specified in Section 1010.2.11.4
- 2. Locations where national security interests are present with approval of the *building official*.
- 3. Modified arrangements may be made for nursery and obstetric areas, assisted living facilities and other similar facilities with approval of the *building official*.

(Note: For interior locations such as elevator lobbies, access includes passage into and through the tenant space being secured to provide access to the stairway. If access through the secured area is not desired, another exiting method such as providing a public corridor to the stairway should be utilized.)

1010.2.11.2 General. Electronic locking devices installed in such a manner that the method of unrestricted exiting relies upon electricity or electronics instead of mechanical means shall comply with the provisions set forth in this section. General guidelines for such installation are as follows:

1. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.

- 2. Access to exits, even in non-fire situations, shall be available to arrival and individual those individuals that are considered as unauthorized. Manually activated release shall be made available. For specific provisions and exceptions, see mechanisms Section 1010.2.11.4
- 3. For emergency situations, buildings shall be provided with an automatic release mechanism as specified in Section 1010.2.11.5.
- 4. Once released, the door shall swing freely as a push/pull door. For specific provisions and exceptions, see Section 1010.2.11.6.
- 5. Request to exit buttons, break glass boxes and emergency pull boxes, with their required signs, shall be installed in accordance with Sections 1010.11.2.4 and 1010.2.11.7.
- 6. All devices used in a fire rated/fire door situation shall be approved for such use.

1010.2.11.3 Permits and inspections. A separate permit is required to install electronic security devices. Permits will be issued as SE permits and the fee will be based on the value of the work. Delayed egress locks meeting the criteria set forth in Section 1010.11.2.7 will not require separate permits. Electronic security devices shall be approved by the building official and shall be functionally tested by the fire marshal.

1010.2.11.4 Access to exits/manual release mechanisms. Passage through the secured door shall be provided.

(Note: Under usual circumstances, passage by individuals on the inside, going to the outside, is made available. Controls are usually installed to prevent unauthorized entry. Examples of such installations are the lobby entrance doors where exiting is by pushing the exit button.)

Normal passage shall be provided with the use of an approved button installed in accordance with Section 1010.2.11.7.

Other acceptable normal release methods for all other occupancies may include options as follows:

- 1. Pushing on or making contact with an approved electronic release bar. Such bars shall be installed such that they will fail in the released position should the electrical connection with the bar be lost.
- 2. Where panic or fire exit hardware is required by Section 1010.2.9, operation of the listed panic or fire exit hardware also releases the electromagnetic lock.

3. Use of an approved motion detector. Upon detection of an approach, the device will unlatch. When using a motion detector, a release button in accordance with Section 1010.2.11.7 is still required to be installed in case of failure or inaccurate detection of the motion device.

When access to the exits requires passage through the device, manual release mechanisms shall be made available.

(Note: Examples of such installations that shall provide a manual override method are as follows:

- 1. Elevator lobbies on full floor tenants. Access to the exit stairs is controlled and the exit path is through the device and tenant space. To permit access to the stairs, a manual override system shall be installed.
- 2. Warehouses/factories where employees are required to enter and exit through one point. Use of other building exits are undesired and controlled. A manual override system shall still be installed at the controlled exits.
- 3. Secured systems where employee ingress/egress is monitored at all secured doors. A manual override system shall still be installed at each door.
- 4. Occupancies like jewelry stores where the desire is to buzz entry and exit. Buzzing entry is acceptable. Buzzing exit may be used but a manual override system shall still be installed at the door.)

When passage of individuals is undesired, unless other approved exits are available, access at the option of the individual shall be provided. Acceptable release methods may include options as follows:

- 1. An emergency pull box or a break glass emergency box may be located adjacent to the door to activate the release in an emergency. Choice of box shall be approved by the fire chief so as not to be confused with any other alarm boxes. An approved sign shall be adjacent to the box with the appropriate message such as "Pull to Open Door" or "Break Glass to Open Door."
- 2. When approved by the building official, a release button will not be required for buildings provided with an approved automatic sprinkler system throughout with monitored 24-hour security personnel on site, if a means for two-way communication with security such as intercom or telephone is provided in an approved location. Controls shall be provided at the security station for unlatching the electronic device. The two-way communication system shall be wired through a supervised circuit as defined in the *Dallas Fire Code*.

3. In I Occupancies provided with an approved automatic sprinkler system throughout, the release button will not be required provided a control for releasing the device is provided at a nurse station and a deactivation method, e.g. a keyed control, a control pad or card reader, is provided at the door and staff is supplied with the appropriate tool or knowledge to operate the release mechanism.

1010.2.11.5 Automatic release mechanisms. Electronic locking devices shall have automatic releasing that complies with the following:

- 1. Automatically release upon activation of the smoke detection or fire alarm system, if provided. The control devices shall remain unlocked until the system has been reset.
- 2. When the area of concern has a sprinkler system, automatically release upon activation of a waterflow alarm or trouble signal. The control devices shall remain unlocked until the system is reset.
- 3. Automatically release upon loss of electrical power to the building or to the electronic device. Locking mechanisms shall not be provided with emergency backup power such as generators or batteries.
- 4. Automatically release upon activation of a manual release mechanism as specified in Section 1010.2.11.4 and as further specified in Section 1010.2.11.7.

Manually resetting the devices is not required. Automatically resetting the devices may be done by zone.

1010.2.11.5.1 Zone control. Deactivation of the device(s) may be zone controlled as follows:

- 1. All devices on the same floor as the source of activation in fully sprinklered buildings.
- 2. All devices on the same floor as the source of activation of the smoke detection system plus one floor below and all floors above in unsprinklered buildings.

(Note: When security is still desired after the automatic release of the system, or when positive latching is necessary for fire door installation, it is still possible to maintain security provided the appropriate combination of devices is installed. As_an example, use of panic hardware or doorknobs that provide mechanical exiting at all times, but do not function from the exterior unless electronically activated, will still provide a secured door. It will provide the required manual exiting but entry by card or code is not available until the system resets.

No such provision of restricting entry can be used when passage through the device is necessary for access to the exit. As an example, when the elevator lobby is secured from the exit stairs by a full floor tenant, upon automatic activation those devices shall release and access be provided through the tenant space to the stairs. A manual locking system cannot be installed to insure security.)

1010.2.11.6 Door swing freely/single exit motion. Doors shall swing freely when the device is released.

(Note: It is required that the exit motion require only one activity. With normal doors, one activity is pushing the mechanical panic bar or turning the mechanical doorknob. With an electronic device, one motion is pushing the button; therefore, pushing the button and pushing a panic bar or turning a doorknob would be two activities. An acceptable alternative is to use a motion detector (push button is still required). The motion detector will release the device upon approach and turning the doorknob is now just one activity. The push button is only necessary should the motion device fail. Another option is to use an electronic panic bar. One motion, pushing the bar, is for exiting but entry is controlled. Or, use of an electronic doorknob where exiting is always mechanical but the entry side does not engage without electronic activation.)

Exception: When doors are required to have positive latching, the building official and fire chief shall determine:

- 1. if a double motion to exit, i.e. the release of the electronic device then the operation of a door knob or push bar, is an acceptable exit means; or
- 2. if the latch should be designed to fail in the secure position; or
- 3. whether to deny the usage of the locks.

1010.2.11.7 Request to exit buttons/break glass boxes/emergency pull boxes. Exit buttons, break glass boxes and emergency pull boxes shall be installed as follows:

- 1. **Button.** The release button shall be red in color and at least a 2-inch mushroom switch or two-inch square lexan palm button.
- 2. **Location.** The button, break glass box or emergency pull box shall be located 40 inches (1016 mm) to 48 inches (1219 mm) vertically above the floor and within five feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device.
- 3. **Sign.** An approved sign shall be adjacent to the button, break glass box or emergency pull box with the words "Push to Exit" or "Pull to Exit" as applicable. Sign lettering shall be white on a red background and at least one inch (25 mm) in height and shall have a stroke of not less than ¹/₈ inch (3.2 mm).

4. **Activation.** When operated, the manual unlocking device shall result in direct interruption of power to the device, independent of the access control system electronics, and the device shall remain unlocked for a minimum of 30 seconds. It shall not be required that the release mechanism be constantly held, such as holding down the button, to get out.

(Note: When buzzing someone out, holding down the button is acceptable; however, the manual release device installed at the door, even those required in the occupancy using buzzing, shall not require constant holding down to exit.)

- 5. **Time delay.** Exit devices in accordance with this section shall not possess a time delay option."
- 100. Paragraph 1011.5.2, "Riser Height and Tread Depth," of Subsection 1011.5, "Stair Treads and Risers," of Section 1011, "Stairways," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:

"1011.5.2 Riser height and tread depth. Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the nosings of adjacent treads or between stairway landing and the adjacent tread. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's nosing. Winder treads shall have a minimum tread depth of 11 inches (279 mm) between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline and a minimum tread depth of 10 inches (254 mm) within the clear width of the stair.

- 1. Spiral stairways in accordance with Section 1011.10.
- 2. *Stairways* connecting stepped *aisles* to cross *aisles* or concourses shall be permitted to use the riser/tread dimension in Section 1030.14.2.
- 3. In Group R-3 occupancies; within *dwelling units* in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual *dwelling units* in Group R-2 occupancies; the maximum riser height shall be 7³/₄ inches (197 mm); the minimum tread depth shall be 10 inches (254 mm); the minimum *winder* tread depth at the walkline shall be 10 inches (254 mm); and the minimum *winder* tread depth shall be 6 inches (152 mm). A *nosing* projection not less than ³/₄ inch (19.1 mm) but not more than 1¹/₄ inches (32 mm) shall be provided on *stairways* with solid risers where the tread depth is less than 11 inches (279 mm).

- 4. See Section 503.1 of the <u>Dallas</u> [International] Existing Building Code for the replacement of existing stairways.
- 5. In Group I-3 facilities, *stairways* providing access to guard towers, observation stations and control rooms, not more than 250 square feet (23 m²) in area, shall be permitted to have a maximum riser height of 8 inches (203 mm) and a minimum tread depth of 9 inches (229 mm).
- 6. Private curved stairways used as convenience stairways may be provided with a minimum width of run of not less than 10 inches (254 mm) measured 6 inches (152.4 mm) from the interior radius and a maximum width of run of not more than 18 inches (457.2 mm) measured 6 inches (152.4 mm) from the exterior radius."
- 101. Subsection 1011.9, "Curved Stairways," of Section 1011, "Stairways," of Chapter 10,
- "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1011.9 Curved stairways. Curved stairways with winder treads shall have treads and risers in accordance with Section 1011.5 and the smallest radius shall be not less than twice the minimum width or required capacity of the stairway.

- <u>1.</u> The radius restriction shall not apply to curved *stairways* in Group R-3 and within individual dwelling units in Group R-2.
- 2. Private curved stairways may be used as convenience stairways, provided the width of the stairway is not less than 44 inches (1711.6 mm) with the interior radius not less than 44 inches (1711.6 mm). In all cases the stairway must comply with Chapter 6 and the structural provisions of this code."
- 102. Subsection 1012.1, "Scope," of Section 1012, "Ramps," of Chapter 10, "Means of

Egress," of the 2021 International Building Code is amended to read as follows:

"1012.1 Scope. The provisions of this section shall apply to ramps used as a component of a means of egress.

- 1. Ramped *aisles* within assembly rooms or spaces shall comply with the provisions in Section 1030.
- 2. Curb ramps shall comply with ICC A117.1 or with Section 1101.2.

- 3. Vehicle ramps in parking garages for pedestrian *exit access* shall not be required to comply with Sections 1012.3 through 1012.10 where they are not an *accessible route* serving *accessible* parking spaces, other required accessible elements or part of an *accessible means of egress*."
- 103. Subsection 1013.5, "Internally Illuminated Exit Signs," of Section 1013, "Exit Signs," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1013.5 Internally illuminated exit signs. Electrically powered, self-luminous and photoluminescent exit signs shall be listed and labeled in accordance with UL 924 and shall be installed in accordance with the manufacturer's instructions and Chapter 27. Exit signs shall be illuminated at all times. Photoluminescent exit signs require plans and documents demonstrating a sufficient source of activation in any given 24-hour period."
- 104. Subsection 1016.2, "Egress Through Intervening Spaces," of Section 1016, "Exit Access," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.
 - 1. Exit access through an enclosed elevator lobby is permitted. Where access to two or more exits or exit access doorways is required in Section 1006.2.1, access to not less than one of the required exits shall be provided without travel through the enclosed elevator lobbies required by Section 3006. Where the path of exit access travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this code.
 - 2. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an exit.
 - **Exception:** *Means of egress* are not prohibited through adjoining or intervening rooms or spaces in a Group H, S or F occupancy where the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.
 - 3. An exit access shall not pass through a room that can be locked to prevent egress.
 - 4. *Means of egress* from *dwelling units* or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.

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5. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

Exceptions:

- 1. *Means of egress* are not prohibited through a kitchen area serving adjoining rooms constituting part of the same *dwelling unit* or *sleeping unit*.
- 2. *Means of egress* are not prohibited through stockrooms in Group M occupancies where all of the following are met:
 - 2.1. The stock is of the same hazard classification as that found in the main retail area.
 - 2.2. Not more than 50 percent of the *exit access* is through the stockroom.
 - 2.3. The stockroom is not subject to locking from the egress side.
 - 2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) *aisle* defined by full-or partial-height fixed walls or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.
- 3. In a building protected throughout by an *approved automatic sprinkler system*, one *exit* may pass through a kitchen or storeroom provided:
 - 3.1. The *exit* door must be visible upon entering the kitchen or storeroom and must be clearly marked and identifiable as an *exit*; and
 - 3.2. The required *exit* width through the kitchen or storeroom must be permanently marked and must be maintained clear and unobstructed.
- **1016.2.1 Multiple tenants.** Where more than one tenant occupies any one floor of a building or structure, each tenant space, *dwelling unit* and *sleeping unit* shall be provided with access to the required *exits* without passing through adjacent tenant spaces, *dwelling units* and *sleeping units*.

Exception: The *means of egress* from a smaller tenant space shall not be prohibited from passing through a larger adjoining tenant space where such rooms or spaces of the smaller tenant occupy less than 10 percent of the area of the larger tenant space through which they pass; are the same or similar occupancy group; a discernible path of egress travel to an *exit* is provided; and the *means of egress* into the adjoining space is not subject to locking from the egress side. A required means of egress serving the larger tenant space shall not pass through the smaller tenant space or spaces."

105. Table 1017.2, "Exit Access Travel Distance," of Subsection 1017.2, "Limitations," of Section 1017, "Exit Access Travel Distance," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:

"TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE²

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)		
A, E, [F-1,] M, R[, S-1]	200e	250 ^b		
I-1	Not Permitted	250 ^b		
B, F-1, S-1	200	300°		
F-2, S-2, U	300	400°		
H-1	Not Permitted	75 ^đ		
H-2	Not Permitted	100 ^d		
H-3	Not Permitted	150 ^d		
H-4	Not Permitted	175 ^d		
H-5	Not Permitted	200°		
I-2, I-3	Not Permitted	200°		
I-4	150	200°		

For SI: 1 foot = 304.8 mm.

a. See the following sections for modifications to exit access travel distance requirements:

Section 402.8: For the distance limitation in malls.

Section 407.4: For the distance limitation in Group I-2.

Sections 408.6.1 and 408.8.1: For the distance limitations in Group I-3.

Section 411.2: For the distance limitation in special amusement areas.

Section 412.6: For the distance limitations in aircraft manufacturing facilities.

Section 1006.2.2.2: For the distance limitation in refrigeration machinery rooms.

Section 1006.2.2.3: For the distance limitation in refrigerated rooms and spaces.

Section 1006.3.4: For buildings with one exit.

Section 1017.2.2: For increased distance limitation in Groups F-1 and S-1.

Section 1030.7: For increased limitation in assembly seating.

Section 3103.4: For temporary structures. Section 3104.9: For pedestrian walkways.

- b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- d. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.1.
- e. Group R-3 and R-4 buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3 See Section 903.2.8 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.3."
 - 106. Subsection 1020.2, "Construction," of Section 1020, "Corridors," of Chapter 10,

"Means of Egress," of the 2021 International Building Code is amended to read as follows:

"1020.2 Construction. Corridors shall be fire-resistance rated in accordance with Table 1020.2.1. The *corridor* walls required to be fire-resistance rated shall comply with Section 708 for *fire partitions*.

- 1. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has not less than one door opening directly to the exterior and rooms for assembly purposes have not less than one-half of the required means of egress doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
- 2. A *fire-resistance rating* is not required for *corridors* contained within a *dwelling unit* or *sleeping unit* in an occupancy in Groups I-1 and R.
- 3. A fire-resistance rating is not required for corridors in open parking garages.
- 4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B that is a space requiring only a single *means of egress* complying with Section 1006.2.
- 5. Corridors adjacent to the exterior walls of buildings shall be permitted to have unprotected openings on unrated exterior walls where unrated walls are permitted by Table 705.5 and unprotected openings are permitted by Table 705.8.
- 6. Corridor walls and ceilings within a single tenant space as listed in Table 1020.2.2 and meeting all of the following conditions:
 - <u>6.1. Approved automatic smoke-detection is installed along the path of egress within the corridor.</u>
 - 6.2. The actuation of any detector must activate self-annunciating alarms audible in all areas served by the *corridor*.
 - 6.3. The smoke detection system must be connected to an approved automatic fire alarm system where such a system is provided.
- **1020.2.1 Hoistway opening protection.** Elevator hoistway openings shall be protected in accordance with Section 3006.2.1."
- 107. Table 1020.2, "Corridor Fire-Resistance Rating," of Subsection 1020.2, "Construction," of Section 1020, "Corridors," of Chapter 10, "Means of Egress," of the 2021 International Building Code is renumbered as Table 1020.2.1 and amended to read as follows:

"TABLE 1020.2<u>.1</u> CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	OCCUPANT LOAD SERVED BY		
	CORRIDOR	Without sprinkler system	With sprinkler system
H-1, H-2, H-3	All	Not Permitted	1°
H-4, H-5	Greater than 30	Not Permitted	1°
A, B, E, F, M, S, U	Greater than 30	1	0
Re	Greater than 10	Not Permitted	0.5°/1ª
I-2ª	All	Not Permitted	0
I-1, I-3	All	Not Permitted	1 b, c
I-4	All	1	0

- a. For requirements for occupancies in Group I-2, see Sections 407.2 and 407.3.
- b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.8.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.
- d. Group R-3 and R-4 buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3. See Section 903.2.8 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.3.
- e. In Group R, Divisions 2 and 4 equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, standard ½ inch gypsum wallboard may be substituted for Type X gypsum in construction of the *corridor*. *Corridor* openings must be protected with *approved* self-closing 1¾ inch solid-core door installations or *approved* equivalent. See Section 717 for requirements on fire and smoke dampers."
- 108. Subsection 1020.2, "Construction," of Section 1020, "Corridors," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended by adding a new Table 1020.2.2, "Corridor Fire-Resistance Rating of Single Tenant Space," to read as follows:

"TABLE 1020.2.2 CORRIDOR FIRE-RESISTANCE RATING OF SINGLE TENANT SPACE

CATEGORY	NATURE OF OCCUPANCY SERVED BY CORRIDOR	REQUIRED FIRE- RESISTANCE RATING (hours)		
		Without smoke detectors	With smoke detectors	
I	Uses and occupancies except those listed in Categories II and III	1	0	
II a, b	 Building and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to: Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. Buildings and other structures containing elementary school, secondary school, or day care facilities with an occupant load greater than 250. Buildings and other structures containing adult education facilities such as colleges and universities, with an occupant load greater than 500. Group I-2 occupancies with an occupant load of 50 or more resident care recipients but not having surgery or emergency treatment facilities. Group I-3 occupancies. Any other occupancy with an occupant load greater than 5,000, Power-generating stations, water treatment facilities for potable water, waste water treatment facilities and other public utility facilities not included in Risk Category III. Buildings and other structures not included in Risk Category III containing quantities of toxic or explosive materials that exceed maximum allowable quantities per control area as given in Table 307.1(1) or per outdoor control area in accordance with the <i>Dallas Fire Code</i> and are sufficient to pose a threat to the public if released. 	1	1	
∏∏a,b	 Buildings and other structures designated as essential facilities, including but not limited to: Group I-2 occupancies having surgery or emergency treatment facilities. Fire, rescue, ambulance and police stations and emergency vehicle garages. Designated earthquake, hurricane or other emergency shelters. Designated emergency preparedness, communications and operations centers and other facilities required for emergency response. Power-generating stations and other public utility facilities required as emergency backup facilities required as emergency backup facilities required as emergency backup facilities for Risk Category III structures. Buildings and other structures containing quantities of highly toxic materials that exceed maximum allowable quantities per control area in accordance with the <i>Dallas Fire Code</i> and are sufficient to pose a threat to the public if released. 	1	1	

Aviation control towers, air traffic control centers and emergency aircraft hangars.
Buildings and other structures having critical national defense functions.
Water storage facilities and pump structures required to maintain water pressure for fire suppression.

- a. For the requirements for occupancies in Group I-2, see Section 407.2.
- b. For the requirements for occupancies in Group I-3, see Section 408.8."
- 109. Subsection 1023.5, "Penetrations," of Section 1023, "Interior Exit Stairways and Ramps," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
- "1023.5 Penetrations. Penetrations into or through interior exit *stairways* and *ramps* are prohibited except for the following:
 - 1. Equipment and ductwork necessary for independent ventilation or pressurization.
 - 2. Fire protection systems.
 - 3. Security systems.
 - 4. Two-way communication systems.
 - 5. Electrical raceway for fire department communication systems.
 - 6. Electrical raceway serving the *interior exit stairway* and *ramp* and terminating at a steel box not exceeding 16 square inches (0.010 m²).
 - 7. Structural elements supporting the *interior exit stairway* or *ramp* or enclosure, such as beams or joists.
 - 8. Equipment and piping necessary for fire fighter air replenishment system.

Such penetrations shall be protected in accordance with Section 714. There shall not be penetrations or communication openings, whether protected or not, between adjacent interior exit *stairways* and *ramps*.

Exception: *Membrane penetrations* shall be permitted on the outside of the *interior exit stairway* and *ramp*. Such penetrations shall be protected in accordance with Section 714.4.2."

110. Subsection 1023.12, "Smokeproof Enclosures," of Section 1023, "Interior Exit Stairways and Ramps," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:

"1023.12 Smokeproof enclosures. Where required by Section 403.5.4, 405.7.2, [of] 412.2.2.1, 1007.1.1 or 1007.1.3.2 interior exit *stairways* and *ramps* shall be *smokeproof enclosures* in accordance with Section 909.20.

1023.12.1 Termination and extension. A *smokeproof enclosure* shall terminate at an *exit discharge* or a *public way*. The *smokeproof enclosure* shall be permitted to be extended by an *exit passageway* in accordance with Section 1023.3. The *exit passageway* shall be without openings other than the *fire door assembly* required by Section 1023.3.1 and those necessary for egress from the *exit passageway*. The *exit passageway* shall be separated from the remainder of the building by 2-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both.

Exceptions:

- 1. Openings in the *exit passageway* serving a *smokeproof enclosure* are permitted where *the exit passageway* is protected and pressurized in the same manner as the *smokeproof enclosure*, and openings are protected as required for access from other floors.
- 2. The *fire barrier* separating the *smokeproof enclosure* from the *exit passageway* is not required, provided the *exit passageway* is protected and pressurized in the same manner as the *smokeproof enclosure*.
- 3. A *smokeproof enclosure* shall be permitted to egress through areas on the *level of exit discharge* or vestibules as permitted by Section 1028.

1023.12.2 Enclosure access. Access to the *stairway* or *ramp* within a *smokeproof enclosure* shall be by way of a vestibule or an open exterior balcony.

Exception: Access is not required by way of a vestibule or exterior balcony for *stairways* and *ramps* using the pressurization alternative complying with Section 909.20.5."

- 111. Subparagraph 1030.1.1.1, "Spaces Under Grandstands and Bleachers," of Paragraph 1030.1.1, "Bleachers," of Subsection 1030.1, "General," of Section 1030, "Assembly," of Chapter 10, "Means of Egress," of the 2021 International Building Code is amended to read as follows:
 - "1030.1.1.1 Spaces under grandstands and bleachers. Spaces under grandstands or bleachers shall be separated by fire barriers complying with Section 707 and horizontal assemblies complying with Section 711 with not less than 1-hour fire-resistance-rated construction.

- 1. Ticket booths less than 100 square feet (9.29 m²) in area.
- 2. Toilet rooms.
- 3. Spaces less than 1000 square feet (92.9 m²) and built to prevent the extension of fire and hot gases through penetrations in walls and floors; built to block the free passage of fire and hot gases within a concealed space; and equipped with openings of either solid wood doors or solid or honeycomb core steel doors not less than 1 3/8 inches (34.9 mm) in thickness or an equivalent, or doors/shutters in compliance with Section 716.5.3 with a fire protection rating of not less than 20 minutes. [Other accessory use areas 1,000 square feet (92.9 m²) or less in are and equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.]
- 4. Spaces equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1."
- 112. Subsection 1102.1, "Design," of Section 1102, "Compliance," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended to read as follows:
- "1102.1 Design. Buildings and facilities shall be designed and constructed to be *accessible* in accordance with this code and ICC A117.1.

- 1. Components of projects regulated by and registered with the Architectural Barriers Division of the Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.
- 2. FHA unit dwelling units designed and constructed in accordance with the Fair Housing Act Design Manual—1996 (Updated 1998) will be considered in compliance with the applicable requirements of this chapter."
- 113. Paragraph 1103.2.5, "Construction Sites," of Subsection 1103.2, "General Exceptions," of Section 1103, "Scoping Requirements," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended to read as follows:
 - "1103.2.5 Construction sites. Structures, *sites* and equipment directly associated with the actual processes of construction including, but not limited to, scaffolding, bridging, materials hoists, materials storage, [ef] construction trailers or portable toilet units provided for use exclusively by construction personnel on a construction site are not required to comply with this chapter."

- 114. Subsection 1103.2, "General Exceptions," of Section 1103, "Scoping Requirements," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended by adding a new Paragraph 1103.2.15, "Restricted Occupancy Spaces," to read as follows:
 - "1103.2.15 Restricted occupancy spaces. Vertical access (elevators and platform lifts) is not required for the second floor of two-story control buildings located within a chemical manufacturing facility where the second floor is restricted to employees and does not contain common areas or employment opportunities not otherwise available in *accessible* locations within the same building."
- 115. Subsection 1106.2, "Required," of Section 1106, "Parking and Passenger Loading Facilities," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended to read as follows:
- "1106.2 Required. Where parking is provided, accessible parking spaces shall be provided in compliance with Table 1106.2 in addition to the requirements of the *Dallas Development Code*, except as required by Sections 1106.3 through 1106.5. Where more than one parking facility is provided on a site, the number of parking spaces required to be *accessible* shall be calculated separately for each parking facility.

Exception: This section does not apply to parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles or vehicular impound and motor pools where lots accessed by the public are provided with an accessible passenger loading zone."

- 116. Subsection 1108.2, "Design," of Section 1108, "Dwelling Units and Sleeping Units," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended to read as follows:
- "1108.2 Design. Dwelling units and sleeping units that are required to be Accessible units, Type A units and Type B units shall comply with the applicable portions of Chapter 10 of ICC A117.1. Units required to be Type A units are permitted to be designed and constructed as Accessible units. Units required to be Type B units are permitted to be designed and constructed as Accessible units or as Type A units. Units required to be FHA units are permitted to be designed and constructed as Accessible units, Type A units or Type B units.
 - <u>1108.2.1 Alternate design.</u> *FHA dwelling units* designed and constructed with the following items in accordance with the *Fair Housing Act Design Manual*—1996 (Updated 1998) are considered in compliance with the fair housing requirements of this chapter.

- 1108.2.1.1 Multifamily dwellings. All covered multifamily dwellings built for first occupancy after March 13, 1991 with a building entrance on an *accessible route* must be designed and constructed in such a manner that:
 - 1. The public and common use areas are readily *accessible* to and useable by handicapped persons;
 - 2. All the doors designed to allow passage into and within all premises are sufficiently wide to allow passage by handicapped persons in wheelchairs; and
 - 3. All premises within covered multifamily dwelling units contain the following features of adaptable design:
 - 3.1. An accessible route into and through the covered dwelling unit;
 - 3.2. <u>Light switches</u>, electrical outlets, thermostats and other environmental controls in accessible locations; Reinforcements in bathroom walls to allow later installation of grab bars around the toilet, tub, shower stall and shower seat, where such facilities are provided; and
 - 3.3. Usable kitchens and bathrooms such that an individual in a wheelchair can maneuver about the space."
- 117. Subsection 1108.6, "Group R," of Section 1108, "Dwelling Units and Sleeping Units," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended to read as follows:
- "1108.6 Group R. Accessible units, Type A units, [and] Type B units and FHA units shall be provided in Group R occupancies in accordance with Sections 1108.6.1 through 1108.6.4.
 - **1108.6.1 Group R-1.** Accessible units and Type B units shall be provided in Group R-1 occupancies in accordance with Sections 1108.6.1.1 and 1108.6.1.2.
 - 1108.6.1.1 Accessible units. Accessible dwelling units and sleeping units shall be provided in accordance with Table 1108.6.1.1. On a multiple-building site, where structures contain more than 50 dwelling units or sleeping units, the number of Accessible units shall be determined per structure. On a multiple-building site, where structures contain 50 or fewer dwelling units or sleeping units, all dwelling units and sleeping units on a site shall be considered to determine the total number of Accessible units. Accessible units shall be dispersed among the various classes of units.
 - **1108.6.1.2 Type B units.** In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1108.7.

1108.6.2 Group R-2. Accessible units, Type A units, [and] Type B units, and FHA units shall be provided in Group R-2 occupancies in accordance with Sections 1108.6.2.1 through 1108.6.2.3. Fire walls are not considered in the determination of the number of dwelling units in a structure.

1108.6.2.1 Live/work units. In *live/work units* constructed in accordance with Section 419, the nonresidential portion is required to be *accessible*. In a structure where there are four or more *live/work units intended to be occupied as a residence*, the residential portion of the *live/work unit* shall be a *Type B unit* or *FHA units* must be provided in accordance with Section 1108.6.2.1.1.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1108.7.

1108.6.2.1.1 FHA units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit shall be at least an FHA unit.

Exception: The number of *FHA units* is permitted to be reduced in accordance with the *Fair Housing Act Design Manual*—1996 (Updated 1998).

1108.6.2.2 Apartment houses, monasteries and convents. Type A units and Type B units shall be provided in apartment houses, monasteries and convents in accordance with Sections 1108.6.2.2.1 and 1108.6.2.2.2 or FHA units must be provided in accordance with Section 1108.6.2.1.1. Bedrooms in monasteries and convents shall be counted as units for the purpose of determining the number of units. Where the bedrooms are grouped in sleeping units, only one bedroom in each sleeping unit shall count toward the number of required Type A units.

1108.6.2.2.1 Type A units. In Group R-2 occupancies containing more than 20 *dwelling units* or *sleeping units*, at least 2 percent but not less than one of the units shall be a *Type A unit*. All Group R-2 units on a *site* shall be considered to determine the total number of units and the required number of *Type A units*. *Type A units* shall be dispersed among the various classes of units.

- 1. The number of *Type A units* is permitted to be reduced in accordance with Section 1108.7.
- 2. Existing structures on a site shall not contribute to the total number of units on a site.

1108.6.2.2.2 Type B units. Where there are four or more *dwelling units* or *sleeping units* intended to be occupied as a residence in a single structure, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1108.7.

1108.6.2.3 Group R-2 other than live/work units, apartment houses, monasteries and convents. In Group R-2 occupancies, other than live/work units, apartment houses, monasteries and convents falling within the scope of Sections 1108.6.2.1 and 1108.6.2.2, Accessible units and Type B units shall be provided in accordance with Sections 1108.6.2.3.1 and 1108.6.2.3.2 or FHA units must be provided in accordance with Section 1108.6.2.1.1. Bedrooms within congregate living facilities, dormitories, sororities, fraternities and boarding houses shall be counted as sleeping units for the purpose of determining the number of units. Where the bedrooms are grouped into dwelling or sleeping units, only one bedroom in each dwelling or sleeping unit shall be permitted to count towards the number of required Accessible units.

1108.6.2.3.1 Accessible units. Accessible dwelling units and sleeping units shall be provided in accordance with Table 1108.6.1.1.

1108.6.2.3.2 Type B units. Where there are four or more *dwelling units* or *sleeping units* intended to be occupied as a residence in a single structure, every *dwelling unit* and every *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1108.7.

1108.6.3 Group R-3. In Group R-3 occupancies where there are four or more *dwelling units* or *sleeping units intended to be occupied as a residence* in a single structure, every *dwelling unit* and *sleeping unit intended to be occupied as a residence* shall be a *Type B unit* or an *FHA unit*. Bedrooms within congregate living facilities, dormitories, sororities, fraternities, and boarding houses shall be counted as *sleeping units* for the purpose of determining the number of units.

- 1. The number of *Type B units* is permitted to be reduced in accordance with Section 1108.7.
- 2. The number of *FHA units* is permitted to be reduced in accordance with the *Fair Housing Act Design Manual*—1996 (Updated 1998).
- **1108.6.4 Group R-4.** Accessible units and Type B units shall be provided in Group R-4 occupancies in accordance with Sections 1108.6.4.1 and 1108.6.4.2 or FHA units must be provided in accordance with Section 1108.6.2.1.1.

- **1108.6.4.1** Accessible units. In Group R-4, Condition 1, at least one of the *sleeping units* shall be an *Accessible unit*. In Group R-4, Condition 2, at least two of the *sleeping units* shall be an *Accessible unit*.
- **1108.6.4.2 Type B units.** In structures with four or more *sleeping units intended to be occupied as a residence*, every *sleeping unit intended to be occupied as a residence* shall be a *Type B unit*.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1108.7."

- 118. Subsection 1108.7, "General Exceptions," of Section 1108, "Dwelling Units and Sleeping Units," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended to read as follows:
- "1108.7 General exceptions. Where specifically permitted by Section 1108.5 or 1108.6, the required number of *Type A units* and *Type B units* is permitted to be reduced in accordance with Sections 1108.7.1 through 1108.7.5.
 - 1108.7.1 Structures without elevator service. Where elevator service is not provided in a structure, only the *dwelling units* and *sleeping units* that are located on stories indicated in Sections 1108.7.1.1 and 1108.7.1.2 are required to be *Type A units*. [and] *Type B units* or *FHA units* [strespectively]. The number of *Type A units* shall be determined in accordance with Section 1108.6.2.2.1.
 - **1108.7.1.1** One story with Type B or FHA units required. At least one story containing dwelling units or sleeping units intended to be occupied as a residence shall be provided with an accessible entrance from the exterior of the structure and all units intended to be occupied as a residence on that story shall be Type B units or FHA Type C units.
 - 1108.7.1.2 Additional stories with Type B units or FHA units. Where stories have entrances not included in determining compliance with Section 1108.7.1.1, and such entrances are proximate to arrival points intended to serve units on that story, as indicated in Items 1 and 2, all dwelling units and sleeping units intended to be occupied as a residence served by that entrance on that story shall be Type B units or FHA Type C units.
 - 1. Where the slopes of the undisturbed site measured between the planned entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance are 10 percent or less.
 - 2. Where the slopes of the planned finished grade measured between the entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance are 10 percent or less.

Where arrival points are within 50 feet (15 240 mm) of the entrance, the closest arrival point shall be used to determine access unless that arrival point serves the *story* required by Section 1108.7.1.1.

- **1108.7.2 Multistory units.** A *multistory dwelling unit* or *sleeping unit* that is not provided with elevator service is not required to be a *Type B unit* or *FHA unit*. Where a *multistory unit* is provided with external elevator service to only one floor, the floor provided with elevator service shall be the primary entry to the unit, shall comply with the requirements for a *Type B unit* or an *FHA unit* and, where provided within the unit, a living area, a kitchen and a toilet facility shall be provided on that floor.
- **1108.7.3 Elevator service to the lowest story with units.** Where elevator service in the building provides an *accessible route* only to the lowest *story* containing *dwelling units* or *sleeping units intended to be occupied as a residence*, only the units on that *story* that are *intended to be occupied as a residence* are required to be *Type B units* or *FHA units*.
- **1108.7.4 Site impracticality.** On a site with multiple non-elevator buildings, the number of units required by Section 1108.7.1 to be *Type B units* or *FHA units* is permitted to be reduced to a percentage that is equal to the percentage of the entire *site* having grades, prior to development, that are less than 10 percent, provided that all of the following conditions are met:
 - 1. Not less than 20 percent of the units required by Section 1108.7.1 on the *site* are *Type B* units or *FHA units*;
 - 2. Units required by Section 1108.7.1, where the slope between the building entrance serving the units on that *story* and a pedestrian or vehicular arrival point is no greater than 8.33 percent, are *Type B units* or *FHA* units.
 - 3. Units required by Section 1108.7.1, where an elevated walkway is planned between a building entrance serving the units on that *story* and a pedestrian or vehicular arrival point and the slope between them is 10 percent or less, are *Type B units* or *FHA units*.
 - 4. Units served by an elevator in accordance with Section 1108.7.3 are *Type B units* or *FHA units*.
- 1108.7.5 Flood hazard areas. Type A units, [and] Type B units or FHA units shall not be required for buildings without elevator service that are located in flood hazard areas as established in Section 1612.3 where the minimum required elevation of the lowest floor or the lowest supporting horizontal structural member, as applicable, results in all of the following:
 - 1. A difference in elevation between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet (15 240 mm) exceeding 30 inches (762 mm).

2. A slope exceeding 10 percent between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet (15 240 mm).

Where such arrival points are not within 50 feet (15 240 mm) of the primary entrances, the closest arrival points shall be used."

- 119. Subsection 1110.1, "General," of Section 1110, "Other Features and Facilities," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended to read as follows:
- "1110.1 General. Accessible building features and facilities shall be provided in accordance with Sections 1110.2 through 1110.16.

Exceptions:

- 1. Accessible units, Type A units and Type B units shall comply with Chapter 10 of ICC A117.1.
- FHA dwelling units designed and constructed in accordance with the Fair Housing Act
 <u>Design Manual—1996(Updated 1998)</u> are considered in compliance with these
 provisions."
- 120. Paragraph 1110.2.1, "Family or Assisted-Use Toilet and Bathing Rooms," of Subsection 1110.2, "Toilet and Bathing Facilities," of Section 1110, "Other Features and Facilities," of Chapter 11, "Accessibility," of the 2021 International Building Code is amended to read as follows:
 - "1110.2.1 Family or assisted-use toilet and bathing rooms. In assembly and mercantile occupancies, an accessible family or assisted-use toilet room shall be provided where an aggregate of six or more male or [and] female water closets are provided [is required]. In buildings of mixed occupancy, only those water closets required for the assembly or mercantile occupancy shall be used to determine the family or assisted-use toilet room requirement. In recreational facilities where separate-sex bathing rooms are provided, an accessible family or assisted-use bathing room shall be provided. Fixtures located within family or assisted-use toilet and bathing rooms shall be included in determining the number of fixtures provided in an occupancy.

Exception: Where each separate-sex bathing room has only one shower or bathtub fixture, a family or assisted-use bathing room is not required.

1110.2.1.1 Standard. Family or assisted-use toilet and bathing rooms shall comply with Sections 1110.2.1.2 through 1110.2.1.6.

1110.2.1.2 Family or assisted-use toilet rooms. Family or assisted-use toilet rooms shall include only one water closet and only one lavatory. A family or assisted-use bathing room in accordance with Section 1110.2.1.3 shall be considered a family or assisted-use toilet room.

Exception: The following additional fixtures shall be permitted in a family or assisted- use toilet room.

- 1. A urinal.
- 2. A child-height water closet.
- 3. A child-height lavatory.
- **1110.2.1.3 Family or assisted-use bathing rooms.** Family or assisted-use bathing rooms shall include only one shower or bathtub fixture. Family or assisted-use bathing rooms shall also include one water closet and one lavatory. Where storage facilities are provided for separate-sex bathing rooms, accessible storage facilities shall be provided for family or assisted-use bathing rooms.
- **1110.2.1.4 Location.** Family or assisted-use toilet and bathing rooms shall be located on an *accessible route*. Family or assisted-use toilet rooms shall be located not more than one *story* above or below separate-sex toilet rooms. The *accessible route* from any separate- sex toilet room to a family or assisted-use toilet room shall not exceed 500 feet (152 m).
- **1110.2.1.5 Prohibited location.** In passenger transportation facilities and airports, the *accessible route* from separate-sex toilet rooms to a family or assisted-use toilet room shall not pass-through security checkpoints.
- **1110.2.1.6 Privacy.** Doors to family or assisted-use toilet and bathing rooms shall be securable from within the room and be provided with an "occupied" indicator."
- 121. Subsection 1202.1, "General," of Section 1202, "Ventilation," of Chapter 12, "Interior

Environment," of the 2021 International Building Code is amended to read as follows:

"1202.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1202.5, or mechanical ventilation in accordance with the <u>Dallas</u> [International] Mechanical Code.

Where the air infiltration rate in a *dwelling unit* is [less than] 5 air changes or less per hour when tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with Section R402.4.1.2 of the <u>Dallas</u> [International] Energy Conservation Code—Residential Provisions, the dwelling unit shall be ventilated by mechanical means in accordance with Section 403 of the <u>Dallas</u> [International] Mechanical Code. Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407 of the <u>Dallas</u> [International] Mechanical Code."

- 122. Paragraph [P] 1210.2.2, "Walls and Partitions," of Subsection [P] 1210.2, "Finish Materials," of Section 1210, "Toilet and Bathroom Requirements," of Chapter 12, "Interior Environment," of the 2021 International Building Code is amended to read as follows:
 - "[P]1210.2.2 Walls and partitions. Walls and partitions within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet (1219 mm) above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

Exception: This section does not apply to the following buildings and spaces:

- 1. Dwelling units and sleeping units.
- 2. Toilet rooms that are not accessible to the public and that have not more than one water closet provided that walls around urinals comply with the minimum surrounding material specified by Section 419.3 of the *Dallas Plumbing Code*.

Accessories such as grab bars, towel bars, paper dispensers and soap dishes, provided on or within walls, shall be installed and sealed to protect structural elements from moisture."

- 123. Subsection 1404.5, "Wood Veneers," of Section 1404, "Installation of Wall Coverings," of Chapter 14, "Exterior Walls," of the 2021 International Building Code is amended to read as follows:
- "1404.5 Wood veneers. Wood veneers on exterior walls of buildings of Type I, II, III and IV construction shall be not less than 1 inch (25 mm) nominal thickness, 0.438-inch (11.1 mm) exterior hardboard siding or 0.375-inch (9.5 mm) exterior-type wood structural panels or particleboard and shall conform to the following:
 - 1. The *veneer* shall not exceed 40 feet (12 190 mm) in height above grade. Where *fire-retardant-treated* wood is used, the height shall not exceed 60 feet (18 290 mm) in height above grade.
 - 2. The *veneer* is attached to or furred from a noncombustible backing that is fire-resistance rated as required by other provisions of this code.
 - 3. Where open or spaced wood *veneers* (without concealed spaces) are used, they shall not project more than 24 inches (610 mm) from the building wall.

See Sections 1405.2.1 and 1405.3 for additional limitations."

- 124. Subparagraph 1405.1.1.1, "Ignition Resistance," of Paragraph 1405.1.1, "Types I, II, III and IV Construction," of Subsection 1405.1, "Combustible Exterior Wall Coverings," of Section 1405, "Combustible Materials on the Exterior Side of Exterior Walls," of Chapter 14, "Exterior Walls," of the 2021 International Building Code is amended to read as follows:
 - "1405.1.1.1 Ignition resistance. Where permitted by Section 1405.1.1, combustible *exterior* wall coverings shall be tested in accordance with NFPA 268.

- 1. Wood or wood-based products <u>installed at fully sprinklered exterior exitways</u>, exterior *stairs* or exterior *exit* balconies of Group R occupancies.
- 2. Other combustible materials covered with an exterior weather covering, other than vinyl sidings, included in and complying with the thickness requirements of Table 1404.2.
- 3. Aluminum having a minimum thickness of 0.019 inch (0.48 mm).
- 4. Materials of a Class II flame spread classification may be substituted in lieu of testing in accordance with NFPA 268 for exterior wall coverings of wood or woodbased products and of Type V construction in Group R, Division 1, 2 and 4 occupancies. The finish materials must be such that the required flame spread is an inherent characteristic of the material or is permanently achieved by pressure impregnation.
- **1405.1.1.1 Fire separation 5 feet or less.** Where installed on *exterior walls* having a *fire separation distance* of 5 feet (1524 mm) or less, combustible *exterior wall coverings* shall not exhibit sustained flaming as defined in NFPA 268.
- **1405.1.1.1.2** Fire separation greater than 5 feet. For *fire separation distances* greater than 5 feet (1524 mm), any *exterior wall covering* shall be permitted that has been exposed to a reduced level of incident radiant heat flux in accordance with the NFPA 268 test method without exhibiting sustained flaming. The minimum *fire separation distance* required for the *exterior wall covering* shall be determined from Table 1405.1.1.1.2 based on the maximum tolerable level of incident radiant heat flux that does not cause sustained flaming of the *exterior wall covering*."

125. Table 1505.1, "Minimum Roof Covering Classification for Types of Construction," of Subsection [BF] 1505.1, "General," of Section 1505, "Fire Classification," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2021 International Building Code is amended to read as follows:

"TABLE 1505.1 MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION al-bl

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
В	В	В	C₽[£]	В	Cp[£]	В	В	Cp[c]

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2 .

- a. Unless otherwise required in accordance with the *International Wildland-Urban Interface Code* or due to the location of the building within a fire district in accordance with Appendix D.
- b. Nonclassified roof coverings shall be permitted on buildings of [Group R-3 and] Group U occupancies <u>having not</u> more than 200 square feet of projected roof area. When exceeding 200 square feet of projected roof area, buildings of Group U occupancies may use non-rated, non-combustible [,where there is a minimum fire- separation distance of 6 feet measured from the leading edge of the] roof <u>coverings</u>.
- [c. Buildings that are not more than two stories above grade plane and having not more than 6,000 square feet of projected roof area and where there is a minimum 10-foot fire separation distance from the leading edge of the roof to a lot line on all sides of the building, except for street fronts or public ways, shall be permitted to have roofs of No. 1 cedar or redwood shakes and No. 1 shingles constructed in accordance with Section 1505.7.]"
- 126. Subsection [BF] 1505.7, "Special Purpose Roofs," of Section 1505, "Fire Classification," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2021 International Building Code is deleted.
- 127. Paragraph [BG] 1511.2.4, "Type of Construction," of Subsection [BG] 1511.2, "Penthouses," of Section 1511, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2021 International Building Code is amended to read as follows:
 - "[BG] 1511.2.4 Type of construction. Penthouses shall be constructed of building elements as required for the type of construction of the building on which such penthouses are built. All structures must be designed by an engineer registered in the State of Texas.

- 1. On buildings of Type I construction, the *exterior walls* and roofs of *penthouses* with a *fire separation distance* greater than 5 feet (1524 mm) and less than 20 feet (6096 mm) shall be permitted to have not less than a 1-hour *fire-resistance rating*. The *exterior walls* and roofs of *penthouses* with a *fire separation distance* of 20 feet (6096 mm) or greater shall not be required to have a *fire-resistance rating*.
- 2. On buildings of Type I construction two stories or less in height above grade plane or of Type II construction, the exterior walls and roofs of penthouses with a fire separation distance greater than 5 feet (1524 mm) and less than 20 feet (6096 mm) shall be permitted to have not less than a 1-hour fire-resistance rating or a lesser fire-resistance rating as required by Table 705.5 and be constructed of fire-retardant-treated wood. The exterior walls and roofs of penthouses with a fire separation distance of 20 feet (6096 mm) or greater shall be permitted to be constructed of fire-retardant-treated wood and shall not be required to have a fire-resistance rating. Interior framing and walls shall be permitted to be constructed of fire-retardant-treated wood.
- 3. On buildings of Type III, IV or V construction, the *exterior walls* of *penthouses* with a *fire separation distance* greater than 5 feet (1524 mm) and less than 20 feet (6096 mm) shall be permitted to have not less than a 1-hour fire-resistance rating or a *lesser fire-resistance rating* as required by Table 705.5. On buildings of Type III, IV or VA construction, the *exterior walls* of *penthouses* with a fire separation distance of 20 feet (6096 mm) or greater shall be permitted to be of heavy timber construction complying with Sections 602.4 and 2304.11 or noncombustible construction or fire-retardant-treated wood and shall not be required to have a *fire-resistance rating*."
- 128. Subsection [BS] 1511.7, "Other Rooftop Structures," of Section 1511, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2021 International Building Code is amended by adding a new Paragraph 1511.7.6, "Architectural Appendages," to read as follows:
 - "1511.7.6 Architectural appendages. Architectural appendages used exclusively as decoration or embellishment must comply with Section 1511.2 as penthouses and be of the same type of construction as required for the exterior walls of the building or the roof in which such appendages are located."
- 129. Section 1511, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2021 International Building Code is amended by adding a new Subsection 1511.9, "Wood Surfaces," to read as follows:

- "1511.9 Wood surfaces. Where roof assemblies are required to be fire rated, wood surfaces on roof assemblies such as walks, running tracks and other similar surfaces may be installed when constructed of fire-retardant treated wood. Any space between the wood and the roof surface must be filled with inorganic or Class I material or the space must be fire stopped not to exceed 8 feet (2438.4 mm) in any direction. Weep holes of sufficient size to prevent water accumulation on the roof are permitted."
- 130. Subsection 1512.1, "General," of Section 1512, "Reroofing," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2021 International Building Code is amended to read as follows:
- "1512.1 General. Materials and methods of application used for recovering or replacing an existing roof *covering* shall comply with the requirements of Chapter 15. <u>All individual replacement shingles or shakes shall be in compliance with the rating required by Table 1505.1.</u>

Exceptions:

- 1. Roof replacement or roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of ¼ unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage.
- 2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1502.2 for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1502.2."
- 131. Paragraph 1512.2.1, "Roof Recover," of Subsection 1512.2, "Roof Replacement," of Section 1512, "Reroofing," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2021 International Building Code is amended to read as follows:
 - "1512.2.1 Roof recover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:
 - 1. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.
 - 2. Complete and separate roofing systems, such as standing-seam *metal roof panel* systems, that are designed to transmit the roof *loads* directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.

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- 3. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 1512.3.
- 4. The application of a new protective roof coating over an existing protective roof coating, *metal roof panel*, built-up roof, spray polyurethane foam roofing system, *metal roof shingles*, mineral-surfaced roll roofing, modified bitumen roofing or thermoset and thermoplastic single-ply roofing shall be permitted without tear off of existing roof coverings.
- 5. Where the maximum number of roof coverings, including the new roof covering installation, does not exceed two.

1512.2.1.1 Exceptions. A *roof recover* shall not be permitted where any of the following conditions occur:

- 1. Where the existing roof or *roof covering* is water soaked or has deteriorated to the point that the existing roof or *roof covering* is not adequate as a base for additional roofing.
- 2. Where the existing *roof covering* is slate, clay, cement or asbestos-cement tile.
- 3. Where the existing roof has two or more applications of any type of roof covering."
- 132. Subsection 1612.1, "General," of Section 1612, "Flood Loads," of Chapter 16, "Structural Design," of the 2021 International Building Code is amended to read as follows:
- "1612.1 General. Within *flood hazard areas* as established in Section 1612.3, all new construction of buildings, structures and portions of buildings and structures, including *substantial improvement* and restoration of *substantial damage* to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and *flood loads*. For buildings that are located in more than one *flood hazard area*, the provisions associated with the most restrictive *flood hazard area* shall apply.

Exception: Buildings and structures constructed and elevated as required by floodplain regulations in Article V of the *Dallas Development Code*."

133. Subsection 1704.2, "Special Inspections and Tests," of Section 1704, "Special Inspections and Tests, Contractor Responsibility and Structural Observation," of Chapter 17, "Special Inspections and Tests," of the 2021 International Building Code is amended to read as follows:

"1704.2 Special inspections and tests. Where application is made to the *building official* for construction as specified in Section 301 of Chapter 52, "Administrative Provisions for the Construction Codes" of the *Dallas City Code* [105], the owner or the owner's authorized agent, or the registered design professional in responsible charge, other than the contractor, shall employ one or more *approved agencies* to provide *special inspections* and tests during construction on the types of work specified in Section 1705 and identify the *approved agencies* to the *building official*. The special inspector shall not be employed by the contractor. These *special inspections* and tests are in addition to the inspections by the *building official* that are identified in Section 304 of Chapter 52, "Administrative Provisions for the Construction Codes" of the *Dallas City Code* [110].

Exceptions:

- 1. Special inspections and tests are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
- 2. Unless otherwise required by the *building official*, *special inspections* and tests are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
- 3. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel *light-frame construction* provisions of Section 2211.1.2 or the *conventional light-frame construction* provisions of Section 2308.
- 4. The contractor is permitted to employ the *approved agencies* where the contractor is also the owner.

1704.2.1 Special inspector qualifications. Prior to the start of the construction or upon request, the approved agencies shall provide written documentation to the registered design professional in responsible charge and the building official demonstrating the competence and relevant experience or training of the special inspectors who will perform the special inspections and tests during construction. Experience or training shall be considered relevant where the documented experience or training is related in complexity to the same type of special inspection or testing activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other sections of this code.

The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted to act as the approved agency and their personnel are permitted to act as special inspectors for the work designed by them, provided they qualify as special inspectors.

1704.2.2 Access for special inspection. The construction or work for which *special inspection* or testing is required shall remain accessible and exposed for *special inspection* or testing purposes until completion of the required *special inspections* or tests.

1704.2.3 Statement of special inspections. The applicant shall submit a statement of *special inspections* in accordance with Section 301.4.7 of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* [107.1] as a condition for permit issuance. This statement shall be in accordance with Section 1704.3.

Exception: A statement of *special inspections* is not required for portions of structures designed and constructed in accordance with the cold-formed steel *light-frame construction* provisions of Section 2211.1.2 or the *conventional light-frame construction* provisions of Section 2308.

1704.2.4 Report requirement. Approved agencies shall keep records of special inspections and tests. The approved agency shall submit reports of special inspections and tests to the building official upon request and to the registered design professional in responsible charge. Individual inspection r[R]eports shall indicate that work inspected or tested was or was not completed in conformance to approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the building official and to the registered design professional in responsible charge prior to the completion of that phase of the work. A final report documenting required special inspections and tests, and correction of any discrepancies noted in the inspections or tests, shall be submitted at a point in time agreed upon prior to the start of work by the owner or the owner's authorized agent to the building official.

1704.2.5 Special inspection of fabricated items. Where fabrication of structural, load-bearing or lateral load-resisting members or assemblies is being conducted on the premises of a fabricator's shop, *special inspections* of the *fabricated items* shall be performed during fabrication, except where the fabricator has been approved to perform work without special inspections in accordance with Section 1704.2.5.1.

1704 are not required where the work is done on the premises of a fabricator approved to perform such work without special inspection. Approval shall be based on review of the fabricator's written fabrication procedures and quality control manuals that provide a basis for control of materials and workmanship, with periodic auditing of fabrication and quality control practices by an approved agency, or a fabricator that is enrolled in a nationally accepted inspections program or the building official. At completion of fabrication, the acceptable or approved fabricator shall submit a certificate of compliance to the owner or the owner's authorized agent or the registered design professional in responsible charge, [for submittal to the building official as specified in Section 1704.5] stating that the work was performed in accordance with the approved construction documents. The certificate of compliance shall also be made available to the building official upon request."

- 134. Paragraph 1705.1.1, "Special Cases," of Subsection 1705.1, 'General," of Section 1705, "Required Special Inspections and Tests," of Chapter 17, "Special Inspections and Tests," of the 2021 International Building Code is amended to read as follows:
 - "1705.1.1 Special cases. Special inspections and tests shall be required for proposed work that is, in the opinion of the *building official*, unusual in its nature <u>or to satisfactorily administer other provisions of the codes</u>, such as, but not limited to, the following examples:
 - 1. Construction materials and systems that are alternatives to materials and systems prescribed by this code.
 - 2. Unusual design applications of materials described in this code.
 - 3. Materials and systems required to be installed in accordance with additional manufacturer's instructions that prescribe requirements not contained in this code or in standards referenced by this code.
 - 4. Work designated for special inspections as specified in Section 304 of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code."
- 135. Section 1705, "Required Special Inspections and Tests," of Chapter 17, "Special Inspections and Tests," of the 2021 International Building Code is amended by adding a new Subsection 1705.21, "Special Inspections for Dallas Energy Conservation Code Compliance," to read as follows:
- "1705.21 Special inspections for Dallas Energy Conservation Code compliance. Special inspections are required to verify compliance with the Dallas Energy Conservation Code in accordance with Section 1705.21.1 and 1705.21.2.

1705.21.1 Scope of inspection and testing. The scope of the test is as follows:

- 1. Building envelope.
- 2. Building mechanical system including air leakage testing and duct leakage testing, as applicable.
- 3. Service water heating.
- 4. Electric lighting and power system.

- **1705.21.2 Qualifications.** Special inspectors for *Dallas Energy Conservation Code* inspections shall have a current International Code Council certification in the relevant energy code inspection specialty as required by the state of Texas."
- 136. Section 1705, "Required Special Inspections and Tests," of Chapter 17, "Special Inspections and Tests," of the 2021 International Building Code is amended by adding a new Subsection 1705.22, "Special Inspections for Dallas Green Code Construction Code Compliance," to read as follows:
- "1705.22 Special inspections for Dallas Green Construction Code compliance. Special inspections are required to verify compliance with the Dallas Green Construction Code in accordance with Sections 1705.22.1 and 1705.22.2.

1705.22.1 Scope of inspection and testing.

- **1705.22.1.1 Single-family or duplex structures.** The scope of work required is stipulated in the *Dallas Green Construction Code*.
- **1705.22.1.2 Commercial structures.** The scope of work required is stipulated in the *Dallas Green Construction Code*.
- **1705.22.2 Qualifications.** Special inspectors for *Dallas Green Construction Code* inspections shall be qualified as stipulated by the building official."
- 137. Paragraph 1809.5.1, "Frost Protection at Required Exits," of Subsection 1809.5, "Frost Protection," of Section 1809, "Shallow Foundations," of Chapter 18, "Soils and Foundations," of the 2021 International Building Code is deleted.
- 138. Subsection 2503.1, "Inspection," of Section 2503, "Inspection," of Chapter 25, "Gypsum Board, Gypsum Panel Products and Plaster," of the 2021 International Building Code is amended to read as follows:
- "2503.1 Inspection. Lath, gypsum board and gypsum panel products shall be inspected in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code [Section 110.3.5]."

- 139. Section 2702, "Emergency and Standby Power Systems," of Chapter 27, "Electrical," of the 2021 International Building Code is amended by adding a new Subsection 2702.5, "Designated Critical Operations Areas (DCOA)," to read as follows:
- **"2702.5 Designated critical operations areas (DCOA):** In areas within a facility or site requiring continuous operation for the purpose of public safety, emergency management, national security or business continuity, the power systems shall comply with NFPA 70 Article 708."
- 140. Subsection [P] 2901.1, "Scope," of Section 2901, "General," of Chapter 29, "Plumbing Systems," of the 2021 International Building Code is amended to read as follows:
- "[P] 2901.1 Scope. The provisions of this chapter and the <u>Dallas</u> [International] Plumbing Code shall govern the design, construction, erection and installation of plumbing components, appliances, equipment and systems used in buildings and structures covered by this code. Toilet and bathing rooms shall be constructed in accordance with Section 1210. Private sewage disposal systems shall conform to the <u>Dallas Plumbing</u> [International Private Sewage Disposal] Code. The <u>Dallas</u> [International] Fire Code, [the International Property Maintenance Code] and the <u>Dallas</u> [International] Plumbing Code shall govern the use and maintenance of plumbing components, appliances, equipment and systems. The <u>Dallas</u> [International] Existing Building Code and the <u>Dallas</u> [International] Plumbing Code shall govern the alteration, repair, relocation, replacement and addition of plumbing components, appliances, equipment, and systems. The provisions of this chapter are meant to work in coordination with the provisions of Chapter 4 of the Dallas Plumbing Code. Should any conflicts arise between the two chapters, the building official shall determine which provision applies."
- 141. Subsection [P] 2902.1, "Minimum Number of Fixtures," of Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2021 International Building Code is amended to read as follows:
- "[P] 2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number in accordance with this section and as shown in Table 2902.1 based on the actual use of the building or space. Uses not shown in Table 2902.1 shall be considered individually by the code official. The number of occupants shall be determined by this code.
 - 1. <u>Assembly occupancies: At least one drinking fountain must be provided at each floor level in an approved location.</u>

Exception: A drinking fountain need not be provided in a drinking or dining establishment.

- 2. <u>Diaper changing accommodations in restrooms as required by Section 19-38 of the *Dallas City Code*.</u>
- 3. Groups A, B, F, I, M and S occupancies: Buildings, floors, tenant spaces or portions thereof where persons are employed must be provided with at least one water closet for each sex except as provided in Section 2902.2. Such water closet rooms in connection with food establishments where food is prepared, stored or served must have hand washing facilities therein or adjacent thereto. At least one drinking fountain must be provided at each floor level in an approved location.
- 4. Group E and R occupancies must be provided with fixtures as shown in Table 2902.1.

It is recommended, but not required, that the minimum number of fixtures provided also comply with the number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be considered individually by the *building official*. The number of occupants shall be determined by this code. Occupancy classification shall be determined in accordance with Chapter 3.

[P] 2902.1.1 Fixture calculations. To determine the *occupant load* of each sex, the total *occupant load* shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the *occupant load* of each sex in accordance with Table 2902.1. Fractional numbers resulting from applying the fixture ratios of Table 2902.1 shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded up to the next whole number.

Exceptions:

- 1. The total *occupant load* shall not be required to be divided in half where *approved* statistical data indicate a distribution of the sexes of other than 50 percent of each sex.
- 2. Where multiple-user facilities are designed to serve all genders, the minimum fixture count shall be calculated 100 percent, based on total *occupant load*. In such multiple-user facilities, each fixture type shall be in accordance with ICC A117.1 and each urinal that is provided shall be located in a stall.
- 3. Distribution of the sexes is not required where single-user water closets and bathing room fixtures are provided in accordance with Section 2902.1.2.

2902.1.1.1 Occupant load for minimum plumbing facilities. In determining minimum plumbing facilities, the number of occupants for whom minimum plumbing facilities are provided must be computed in accordance with Section 1004.

Exception: Where state law or city ordinance limits the number of students per classroom, fixtures in primary and secondary schools may be provided on the basis of the maximum number of students allowed.

[P] 2902.1.2 Single-user toilet and bathing room fixtures. The plumbing fixtures located in single-user toilet and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1110.2.1, shall contribute toward the total number of required plumbing fixtures for a building or tenant space. Single-user toilet and bathing rooms, and family or assisted-use toilet rooms and bathing rooms shall be identified as being available for use by all persons regardless of their sex.

The total number of fixtures shall be permitted to be based on the required number of separate facilities or based on the aggregate of any combination of single-user or separate facilities.

[P] 2902.1.3 Lavatory distribution. Where two or more toilet rooms are provided for each sex, the required number of lavatories shall be distributed proportionately to the required number of water closets.

<u>2902.1.4 Additional fixtures for food preparation facilities.</u> In addition to the fixtures required in this chapter, all food service facilities must be provided with additional fixtures as required in this section.

2902.1.4.1 Hand washing lavatory. At least one hand washing lavatory must be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

2902.1.4.2 Service sinks and floor sinks. In new or remodeled food service establishments, at least one service sink or one floor sink must be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tools and for the disposal of mop water and similar liquid waste. The location of the service sinks or mop sinks must be approved by the health department."

142. Subsection [P] 2902.2, "Separate Facilities," of Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2021 International Building Code is amended to read as follows:

[P] 2902.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.

- 2. Separate facilities shall not be required in structures or tenant spaces with a total *occupant load*, including both employees and customers, of 15 or fewer where the structure or tenant space is deemed to be equivalent to a building occupied by a single tenant and approved by the building official.
- 3. Separate facilities shall not be required in mercantile occupancies in which the maximum *occupant load* is 100 or fewer.
- 4. Separate facilities shall not be required in business occupancies in which the maximum *occupant load* is 25 or fewer.
- 5. Separate facilities shall not be required to be designated by sex where single-user toilets rooms are provided in accordance with <u>Section 2902.1.2</u>.
- 6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets are installed in accordance with Section 405.3.4 of the <u>Dallas</u> [International] Plumbing Code. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall.
- **[P] 2902.2.1 Family or assisted-use toilet facilities serving as separate facilities.** Where a building or tenant space requires a separate toilet facility for each sex and each toilet facility is required to have only one water closet, two family or assisted-use toilet facilities shall be permitted to serve as the required separate facilities. Family or assisted-use toilet facilities shall not be required to be identified for exclusive use by either sex as required by Section 2902.4"
- 143. Subsection [P] 2902.6 "Small Occupancies," of Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2021 International Building Code is amended to read as follows:
- "[P] 2902.6 Small occupancies. Drinking fountains shall not be required for a building occupied by a single tenant of Group M occupancy with an occupant load of 100 [15] or fewer, or a Group B Occupancy with an occupant load of 25 or fewer. This provision may be applied to other locations of Group M and Group occupancies if deemed to be equivalent to a building occupied by a single tenant and approved by the building official."
- 144. Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2021 International Building Code is amended by adding a new Subsection 2902.8, "Finish Material," to read as follows:

"2902.8 Finish material. Finish materials must comply with Section 1210."

- 145. Subsection 3001.3, "Referenced Standards," of Section 3001, "General," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended to read as follows:
- "3001.3 Referenced standards. Except as otherwise provided for in this code, the design, construction, installation, alteration, repair and maintenance of elevators and conveying systems and their components shall conform to applicable standard specified in Table 3001.3 and ASCE 24 for construction in *flood hazard areas* established in Section 1612.3.

Exception: The appendices of ASME A17.1—2013 do not apply. The building owner is responsible for the safe operation and maintenance of each elevator, dumbwaiter, escalator or moving walk installation and shall cause periodic inspections, tests and maintenance to be made of such conveyances."

- 146. Subsection 3001.4, "Accessibility," of Section 3001, "General," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended to read as follows:
- "3001.4 Accessibility. Passenger elevators required to be accessible or to serve as part of an accessible means of egress shall comply with Sections 1009 and 1110.8.

Exception: Passenger elevators regulated under Article 9102, "Architectural Barriers," of *Vernon's Texas Civil Statutes* and the "Texas Accessibility Standards of the Architectural Barriers Act," adopted by the Texas Commission of Licensing and Regulation pursuant to Article 9102 and built in accordance with state certified plans, including any variances granted by the state, will be deemed in compliance with the requirements of this chapter."

- 147. Section 3002.1, "Hoistway Enclosure Protection," of Section 3002, "Hoistway Enclosures," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended to read as follows:
- "3002.1 Hoistway enclosure protection. Elevator, dumbwaiter and other hoistway enclosures shall be *shaft enclosures* complying with Sections 712 and 713.

- 1. Elevators wholly located within atriums complying with Section 404 shall not require hoistway enclosure protection.
- 2. Elevators in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall not require hoistway enclosure protection.
- **3002.1.1 Opening protectives.** Openings in hoistway enclosures shall be protected as required in Chapter 7.

Exception: The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I Emergency Recall Operation.

- **3002.1.2 Hardware.** Hardware on opening protectives shall be of an *approved* type installed as tested, except that *approved* interlocks, mechanical locks and electric contacts, door and gate electric contacts and door-operating mechanisms shall be exempt from the fire test requirements."
- 148. Subsection 3005.4, "Machine Rooms, Control Rooms, Machinery Spaces, and Control Spaces," of Section 3005, "Machine Rooms," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended to read as follows:
- "3005.4 Machine rooms, control rooms, machinery spaces, and control spaces. The following room and spaces shall be enclosed with *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both:
 - 1. Machine rooms
 - 2. Control rooms
 - 3. Control spaces
 - 4. Machinery spaces outside of the hoistway enclosure

The *fire-resistance rating* shall be not less than the required rating of the hoistway enclosure served by the machinery. Openings in the *fire barriers* shall be protected with assemblies having a *fire protection rating* not less than that required for the hoistway enclosure doors.

Exceptions:

1. For other than fire service access elevators and occupant evacuation elevators, where machine rooms, machinery spaces, control rooms and control spaces do not abut and have no openings to the hoistway enclosure they serve, the *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both, shall be permitted to be reduced to a 1-hour *fire-resistance* rating.

- 2. For other than fire service access elevators and occupant evacuation elevators, in buildings four *stories* or less above *grade plane* where machine room, machinery spaces, control rooms and control spaces do not abut and have no openings to the hoistway enclosure they serve, the machine room, machinery spaces, control rooms and control spaces are not required to be fire-resistance rated <u>although the physical separation must be maintained from the rest of the building</u>.
- 3. Elevator machine rooms, control rooms, machinery spaces and control spaces completely located within atriums shall not require enclosure protection.
- 4. Elevator machine rooms, control rooms, machinery spaces and control spaces in open or enclosed parking garages that serve only the parking garage, shall not require enclosure protection.
- 5. Self-contained elevator and control systems as approved by the building official."
- 149. Section 3005, "Machine Rooms," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended by adding a new Subsection 3005.7, "Fire Protection in Machine Rooms, Control Rooms, Machinery Spaces and Control Spaces," to read as follows:
- "3005.7 Fire protection in machine rooms, control rooms, machinery spaces and control spaces.
 - **3005.7.1 Automatic sprinkler system.** The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.7.1.1.
 - **3005.7.1.1 Prohibited locations.** Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoistways.

Exception: Sprinklers may be installed at the bottom of the pit as required in ASME A17.1 and installed in accordance with NFPA 13.

3005.7.1.2 Sprinkler system monitoring. The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

- **3005.7.2** Water protection. An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.
- **3005.7.3 Shunt trip.** Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.
- **3005.7.4 Detection.** The elevator machine room, machine room, machinery space, control room, control space or hoistway of traction elevators must be protected by smoke detectors or other automatic fire detection installed in accordance with NFPA 72."
- 150. Section 3005, "Machine Rooms," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended by adding a Subsection 3005.8 "Storage," to read as follows:
- "3005.8 Storage. Storage shall not be allowed within the elevator machine room, control room, machinery spaces and/or control spaces and shall provide approved signage at each entry to the above listed locations stating: "No Storage Allowed.""
- 151. Subsection 3006.2, "Hoistway Opening Protection Required," of Section 3006, "Elevator Lobbies and Hoistway Opening Protection," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended to read as follows:
- "3006.2 Hoistway opening protection required. Elevator hoistway door openings shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three *stories*, is required to be enclosed within a *shaft enclosure* in accordance with Section 712.1.1 and any of the following conditions apply:
 - 1. The building is not protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
 - 2. The building contains a Group I-1, Condition 2 occupancy.
 - 3. The building contains a Group I-2 occupancy.
 - 4. The building contains a Group I-3 occupancy.

5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 mm) in height. The height of the hoistway shall be measured from the *lowest floor* at or below grade to the highest floor at or above grade of the floors served by the hoistway.

Exceptions:

- 1. Protection of elevator hoistway door openings is not required where the elevator serves only *open parking garages* in accordance with Section 406.5.
- 2. Protection of elevator hoistway door openings is not required at the level(s) of exit discharge, provided that the level(s) of exit discharge is equipped with an *automatic* sprinkler system in accordance with Section 903.3.1.1.
- 3. Enclosed elevator lobbies and protection of elevator hoistway door openings are not required on levels where the elevator hoistway opens to the exterior.
- **3006.2.1 Rated corridors.** Where *corridors* are required to be fire-resistance rated in accordance with Section 1020.2, elevator hoistway openings shall be protected in accordance with Section 3006.3."
- 152. Subsection 3007.1, "General," of Section 3007, "Fire Service Access Elevator," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended

to read as follows:

"3007.1 General. Where required by Section 403.6.1, every floor above and including the lowest level of fire department vehicle access of the building shall be served by fire service access elevators complying with Sections 3007.1 through 3007.9. Except as modified in this section, fire service access elevators shall be installed in accordance with this chapter and ASME A17.1/CSA B44. A fire service access elevator must be one that is accessible for general public use. This requirement may be satisfied by an elevator for freight, service or passengers which also meets this condition.

- 1. Elevators that only service an open or enclosed parking garage and the lobby of the building shall not be required to serve as fire service access elevators.
- 2. The elevator shall not be required to serve the top floor of a building where that floor is utilized only for equipment for building systems."

- 153. Subsection 3007.3, "Water Protection," of Section 3007, "Fire Service Access Elevator," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended to read as follows:
- "3007.3 Water protection. Water from the operation of an automatic sprinkler system outside the [enclosed] lobby shall be prevented from infiltrating into the hoistway enclosure in accordance with an *approved* method."
- 154. Subsection 3007.6, "Fire Service Access Elevator Lobby," of Section 3007, "Fire Service Access Elevator," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended to read as follows:
- "3007.6 Fire service access elevator lobby. The fire service access elevator shall open into an enclosed fire service access elevator lobby in accordance with Sections 3007.6.1 through 3007.6.5. Egress is permitted through the enclosed elevator lobby in accordance with Item 1 of Section 1016.2. A fire service access elevator lobby must be one that is accessible for general public use.

Exception: Where a fire service access elevator has two entrances onto a floor, the second entrance shall be permitted to be protected in accordance with Section 3006.3.

3007.6.1 Access to interior exit stairway or ramp. The enclosed fire service access elevator lobby shall have *direct access* from the enclosed elevator lobby to an enclosure for an *interior exit stairway* or *ramp*.

Exception: Access to an *interior exit stairway* or *ramp* shall be permitted to be through a protected path of travel that has a level of fire protection not less than the elevator lobby enclosure. The protected path shall be separated from the enclosed elevator lobby through an opening protected by a smoke and draft control assembly in accordance Section 716.2.2.1.

3007.6.2 Lobby enclosure. The fire service access elevator lobby shall be enclosed with a *smoke barrier* having a *fire-resistance rating* of not less than 1 hour, except that lobby doorways shall comply with Section 3007.6.3.

Exception: Enclosed fire service access elevator lobbies are not required at the *levels of exit discharge*.

3007.6.3 Lobby doorways. Other than doors to the hoistway, elevator control room or elevator control space, each doorway to a fire service access elevator lobby shall be provided with a 3/4-hour *fire door assembly* complying with Section 716. The *fire door assembly* shall comply with the smoke and draft control door assembly requirements of Section 716.2.2.1.1 and be tested in accordance with UL 1784 without an artificial bottom seal.

- **3007.6.4 Lobby size.** Regardless of the number of fire service access elevators served by the same elevator lobby, the enclosed fire service access elevator lobby shall be not less than 150 square feet (14 m²) in an area with a dimension of not less than 8 feet (2440 mm).
- **3007.6.5** Fire service access elevator symbol. A pictorial symbol of a standardized design designating which elevators are fire service access elevators shall be installed on each side of the hoistway door frame on the portion of the frame at right angles to the fire service access elevator lobby. The fire service access elevator symbol shall be designed as shown in Figure 3007.6.5 and shall comply with the following:
 - 1. The fire service access elevator symbol shall be not less than 3 inches (76 mm) in height.
 - 2. The helmet shall contrast with the background, with either a light helmet on a dark background or a dark helmet on a light background.
 - 3. The vertical center line of the fire service access elevator symbol shall be centered on the hoistway door frame. Each symbol shall be not less than 78 inches (1981 mm), and not more than 84 inches (2134 mm) above the finished floor at the threshold."
- 155. Subsection 3008.3, "Water Protection," of Section 3008, "Occupant evacuation Elevators," of Chapter 30, "Elevators and Conveying Systems," of the 2021 International Building Code is amended to read as follows:
- "3008.3 Water protection. Water from the operation of an *automatic sprinkler system* outside the enclosed lobby shall be prevented from infiltrating into the hoistway enclosure in accordance with an *approved* method."
 - 156. Subsection 3102.1, "General," of Section 3102, "Membrane Structures," of Chapter
- 31, "Special Construction," of the 2021 International Building Code is amended to read as follows:
- "3102.1 General. The provisions of Sections 3102.1 through 3102.8 shall apply to air-supported, air-inflated, membrane-covered cable, membrane-covered frame and tensile membrane structures, collectively known as membrane structures, erected for a period of 31 consecutive [180] days or longer. Those erected for a shorter period of time shall comply with the <u>Dallas</u> [International] Fire Code. Membrane structures covering water storage facilities, water clarifiers, water treatment plants, sewage treatment plants, greenhouses and similar facilities not used for human occupancy are required to meet only the requirements of Sections 3102.3.1 and 3102.7. Membrane structures erected on a building, balcony, deck or other structure for any period of time shall comply with this section. A tent, other fabric, membrane structure or portion of a structure intended to be in place temporarily must comply with the provisions of Chapter 39.

- 3102.1.1 Tensile membrane structures and air-supported structures. Tensile membrane structures and air-supported structures, including permanent and temporary structures, shall be designed and constructed in accordance with ASCE 55. The provisions in Sections 3102.3 through 3102.6 shall apply.
- 3102.1.2 Other code provisions. Except as specifically required by this section, membrane structures must meet any other applicable provisions of this code.

Exception: Membrane structures need not comply with the provisions of this section where they completely comply with other applicable provisions of this code.

<u>3102.1.3 Permeable covers.</u> For purposes of this chapter, permeable covers are considered floor area.

Exception: Open-grid covers in which the openings are ¼ inch (6.4 mm) or larger in the least dimension and when such openings constitute at least 75 percent of the area of the covering material."

- 157. Subsection 3103.1, "General," of Section 3103, "Temporary Structures," of Chapter
- 31, "Special Construction," of the 2021 International Building Code is amended to read as follows:
- "3103.1 General. The provisions of Sections 3103.1 through 3103.4 shall apply to structures erected for a period of less than 31 [180] days. Special event structures, tents, umbrella structures and other membrane structures erected for a period of less than 31 consecutive [180] days shall comply with the Dallas [International] Fire Code and Chapter 39 of this code. Those erected for a longer period of time shall comply with applicable sections of this code.
 - **3103.1.1 Conformance.** Temporary structures and uses shall conform to the structural strength, fire safety, *means of egress*, accessibility, light, *ventilation* and sanitary requirements of this code as necessary to ensure public health, safety and general welfare.
 - 3103.1.2 Permit required. Temporary structures shall require permits as per Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Codes [that cover an area great than 120 square feet (11.16 m²), including connecting areas or spaces with a common means of egress or entrance that are used or intended to be used for the gathering together of 10 or more persons, shall not be erected, operated or maintained for any purpose without obtaining a permit from the building official]."
- 158. Subsection 3104.1, "General," of Section 3104, "Pedestrian Walkways and Tunnels," of Chapter 31, "Special Construction," of the 2021 International Building Code is amended to read as follows:

- "3104.1 General. This section shall apply to connections between buildings such as *pedestrian* walkways or tunnels, located at, above or below grade level, that are used as a means of travel by persons. Except for determination of the building fire area in Section 511.1.2, [The] pedestrian walkways shall not contribute to the building area or the number of stories or height of connected buildings.
- **3104.1.1 Application.** *Pedestrian walkways* shall be designed and constructed in accordance with Sections 3104.2 through 3104.9. Tunnels shall be designed and constructed in accordance with Sections 3104.2 and 3104.10."
- 159. Chapter 31, "Special Construction," of the 2021 International Building Code is amended by adding a new Section 3116, "Fixed Guideway Transit System Stations," to read as follows:

"SECTION 3116 FIXED GUIDEWAY TRANSIT SYSTEM STATIONS

3116.1 General. Where provided, fixed guideway transit system stations must be installed in accordance with NFPA 130.

Exception: Means of egress from fixed guideway transit system must comply with Chapter 10."

160. Chapter 31, "Special Construction," of the 2021 International Building Code is amended by adding a new Section 3117, "Storage Racks," to read as follows:

"SECTION 3117 STORAGE RACKS

- **3117.1 Applicability.** The provisions of this section apply to all parts of buildings and structures that contain bin box storage or shelf storage rack systems.
- **3117.2 Definitions.** The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

BIN BOX STORAGE. Storage in five-sided boxes with an open face on each aisle. Boxes are self-supporting or supported by a structure designed so that little or no horizontal or vertical space exists around boxes.

RACK SYSTEMS. Structures designed to store materials and products.

SHELF STORAGE. Storage on structures equal to or less than 30 inches (752 mm) deep with shelves a maximum of 2 feet (610 mm) apart vertically and separated by minimum 30-inch (762 mm) aisles.

- **3117.3 Rack systems.** Bin box storage or shelf storage rack systems, including their aisles and stairs, must not contribute to the number of stories as regulated by Section 503 or to the number of mezzanines as regulated by Section 505 where meeting all of the following conditions:
 - 1. The building, including the *rack systems*, is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.
 - 2. The *rack systems*, aisles, and *stairs* are not part of the structural framework of the building.
 - 3. The *rack systems* and *stairs* are of noncombustible materials. The aisles are of expanded metal or metal grid.
 - 4. The structural design of the *rack systems*, aisles, and *stairs*, complies with Chapter 16 and Section 2209.
 - 5. The aisles and stairways are designed to comply with the means of egress provisions of Chapter 10.
- **3117.4 Other requirements.** In addition, rack storage in high-piled combustible storage areas must comply with Chapter 32 of the *Dallas Fire Code*."
- 161. Subsection 3201.4, "Drainage," of Section 3201, "General," of Chapter 32, "Encroachments into the Public Right-of-Way," of the 2021 International Building Code is amended to read as follows:
- "3201.4 Drainage. Drainage water collected from a roof, awning, canopy or marquee, and condensate from mechanical equipment shall not flow over a public walking surface except as permitted by Section 1101 of the Dallas Plumbing Code."
- 162. Section 3303, "Demolition," of Chapter 33, "Safeguards During Construction," of the 2021 International Building Code is deleted and replaced with a new Section 3303, "Demolition," to read as follows:

"SECTION 3303 DEMOLITION

- **3303.1 General.** Demolition activities are regulated under Chapter 40 of this code."
- 163. Subsection 3310.1, "Stairways Required," of Section 3310, "Means of Egress," of Chapter 33, "Safeguards During Construction," of the 2021 International Building Code is amended to read as follows:
- **"3310.1 Stairways required.** Where a building construction exceeds <u>35</u> [40] feet (<u>10 668</u> [12 192] mm) in height above the lowest level of fire department vehicle access, a temporary or permanent *stairway* shall be provided. As construction progresses, such *stairway* shall be extended to within one floor of the highest point of construction having secured decking or flooring."
- 164. Subsection [F] 3311.1, "Where Required," of Section 3311, "Standpipes," of Chapter 33, "Safeguards During Construction," of the 2021 International Building Code is amended to read as follows:
- "[F] 3311.1 Where required. In buildings required to have standpipes by Section 905.3.1, no fewer than one standpipe shall be provided for use during construction. Such standpipes shall be installed prior to construction exceeding 35 [40] feet (10 668 [12 192] mm) in height above the lowest level of fire department vehicle access. Such standpipes shall be provided with fire department hose connections at locations adjacent to *stairways* complying with Section 3310.1. As construction progresses, such standpipes shall be extended to within one floor of the highest point of construction having secured decking or flooring."
- 165. The introductory paragraph to Chapter 35, "Referenced Standards," of the 2021 International Building Code is amended to read as follows:
- "About this chapter: The International Building Code® contains numerous references to standards promulgated by other organization that are used to provide requirements for materials and methods of construction. This chapter contains a comprehensive list of all standards that are referenced in this code. These standards, in essence, are part of this code to the extent of the reference to the standard.

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 101.4 of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* [102.4]."

166. The ASME standards of Chapter 35, "Referenced Standards," of the 2021 International Building Code are amended by amending the following standard to read as follows:

- "A17.1—2019/CSA B44—19: Safety Code for Elevators and Escalators
 907.3.3, 911.1.6, 1009.4.1, 1607.11.1, 3001.2, Table 3001.3, 3001.4, 3001.5 3002.5, 3003.2, 3005.7.2.1, 3007.1, 3008.1.4, 3008.7.1"
- 167. The NFPA standards of Chapter 35, "Referenced Standards," of the 2021 International Building Code are amended by adding or amending the following standards to read as follows:
- "13—19: Standard for Installation of Sprinkler Systems
 403.3, 708.2, 712.1.3.1, 903.3.1.1, 903.3.2, 903.3.5.2, 903.3.8.2, 903.3.8.5, 904.13, 905.3.4, 907.6.4, 1019.3, 3005.7.2.1"
- "13D—19: Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes

903.3.1.3, 903.3.5.2"

- "13R—19:Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies 903.3.1.2, 903.3.5.2, 903.4"
- "14—19: Standard for the Installation of Standpipe and Hose System 905.2, 905.3.4, 905.3.9, 905.4.2, 905.6.2, 905.8"
- "25—23: Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems 905.12"
- "72—19: National Fire Alarm and Signaling Code

 $407.4.4.5,407.4.4.5.1,\,901.6,\,903.4.1,\,904.3.5,\,907.1.2,\,907.2,\,907.2.6,\,907.2.9.3,\,907.2.11,\,\underline{907.2.13.1.2},\,907.2.13.2,\,907.3,\,907.3.3,\,907.3.4,\,907.5.2.1.2,\,907.5.2.2,\,907.5.2.2.5,\,907.6,\,907.6.1,\,\underline{907.6.1.4},\,907.6.2,\,907.6.6,\,907.7,\,907.7.1,\,907.7.2,\,,911.1.6,\,917.1\,2702.2.4,\,3005.5,\,3005.7.5,\,3007.7$

"92-18: Standard for Smoke Control Systems

404.6, 909.7, 909.8"

"130-20: Chapter 5, "Station," of the Standard for Fixed Guideway Transit Systems

3116.1"

"409—[16] <u>22:</u> Standard for Aircraft Hangars 412.3.6, Table 412.3.6, 412.3.6.1, 412.5.5" 168. The 2021 International Building Code is amended by adding a new Chapter 36,

"Signs," to read as follows:

"CHAPTER 36 SIGNS

SECTION 3601 PERMITS

3601.1 General. The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of signs and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code in accordance with Chapter 52, "Administrative Procedures of the Construction Codes," of the *Dallas City Code*.

SECTION 3602 DEFINITIONS

3602.1 Definitions. For the purposes of this chapter, definitions contained in the *Dallas Development Code* shall be used.

SECTION 3603 ELECTRICAL

- **3603.1** General. Every sign in which electrical wiring and connections are used shall comply with the requirements of the *Dallas Electrical Code*. In addition, each illuminated sign shall bear the Underwriters Laboratory® label or be built to comply with Underwriters Laboratory® requirements.
- **3603.2** Utility lines. No sign may be erected nearer than 2 feet (609.6 mm) from any telephone cable, electrical street light standard or electrical power distribution line when voltage between conductors is less than 300 volts. If the voltage between conductors is 300 volts or greater, clearance shall be maintained in accordance with the *Dallas Electrical Code*.
- **3603.3 Protection.** Wire glass, safety glass, a locked box of metal or wood, or any other approved method shall protect an electrical device within reach of persons on public property.

SECTION 3604 DESIGN

3604.1 General. Every sign and its supports shall be designed as specified for a building in this code. All supports shall be designed to transfer lateral forces to the foundations. An attached sign shall be designed to transmit the dead and lateral loads through the structural frame of the building in such a manner as to not overstress any element.

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- **3604.2 Wind pressure.** Every sign and its supports shall be designed to withstand a minimum allowable resultant wind pressure of 30 pounds per square foot.
- **3604.3 Dead load resisting moment.** The overturning moment produced from lateral forces may in no case exceed two-thirds of the dead load resisting moment. Uplift shall be adequately resisted by proper anchorage to the ground or to the structural frame of the building. The weight superimposed over footings or supports may be used in determining the dead load resisting moment.
- **3604.4 Allowable stress.** The design of wood, concrete, steel or aluminum members shall conform to the requirements of this code. Loads, both vertical and horizontal, exerted on the soil shall not produce stresses exceeding those specified in this code.

The working stresses of wire rope and its fastening shall not exceed 25 percent of the ultimate strength.

Working stresses for wind loads combined with dead loads may be increased as specified in this code.

SECTION 3605 CONSTRUCTION

- **3605.1 General.** Every sign and its supports shall be built, constructed and erected in conformance with the requirements of all applicable laws and ordinances.
- **3605.2 Materials.** Materials of construction for each sign and its supports shall be of the quality, type and grade as specified for a building in this code. In the absence of detailed requirements, material shall conform to the following:
 - 1. Structural steel shall be of such quality as to conform to Chapter 22. Secondary members of a sign in contact with, or directly supporting the display surface may be formed of light gauge steel, provided the members are designed in accordance with the specifications of the design of light gauge steel as specified in Chapter 22 and are galvanized. Secondary members, when formed integrally with the display surface, shall not be less than No. 24 gauge in thickness. When not formed integrally with the display surface, the minimum thickness of hot-rolled steel members furnishing structural support for a sign shall be ½ inch, except that if galvanized, such members shall not be less than ½ inch thick. Steel pipes shall be of such quality as to conform to Chapter 22. Steel members may be connected with a galvanized bolt, provided the connection is adequate to transfer the stresses in the members.
 - 2. Anchors and supports, when of wood and embedded in the soil or within 6 inches (152.4 mm) of the soil, shall be of all heartwood of a durable species or shall be pressure treated with an approved preservative. Such members shall be marked or branded by an approved agency.
 - 3. Glass thickness and area limitations are as required in Chapter 24.

- 4. Approved plastics may be used as set forth in Chapter 26 for plastic veneer. Location, size and spacing shall be as set forth in Chapter 26 for glazing or veneer.
- 5. Awnings and marquees that also serve as signs shall be constructed of materials as required by Sections 3105 and 3106.
- 6. Attached signs on Type I or Type II buildings, other than those specified in Section 3605.2(5), and detached signs located within 3 feet (914.4 mm) of any Type I or Type II building or within 3 feet (914.4 mm) of any property line, exclusive of a public way, shall be constructed of noncombustible materials.
- **3605.3 Height clearance.** Except for an attached sign which does not project more than 2 inches (50.8 mm) from the building facade, every sign shall have the following minimum clearance from the surface immediately below:
 - 1. Ten feet (3048 mm) when located above a sidewalk.
 - 2. Twelve feet (3657.6 mm) when located above a parking lot, parking space, driveway or head-in parking.
 - 3. Fourteen feet (4267.2 mm) when located above a fire lane.
- **3605.4 Location.** Location of a sign shall be in accordance with the *Dallas Development Code*.
- **3605.5 Clearance from fire escapes, exits or standpipes.** No sign or its supports may be erected in a manner that will interfere in any way with the use of any fire escape, exit or standpipe. No sign or its supports may be attached to a standpipe or fire escape.
- **3605.6 Obstruction of openings in buildings.** No sign or its supports may obstruct any required openings to such an extent that light or ventilation is reduced below that required.
- **3605.7** Weatherproofing. Every sign shall be constructed so as to prevent the accumulation of water.
- **3605.8 Sign maintenance.** The owner of any premises upon which a sign is erected shall maintain the sign and its supports. If any sign becomes dangerous to life, limb or property; or an obstruction to the use of any sidewalk or roadway; or interferes with the operation of the fire department, it is the responsibility of the owner of the premises or the owner's agent to remove or repair the sign."
 - 169. The 2021 International Building Code is amended by adding a new Chapter 37,

"Moving of Structures," to read as follows:

"CHAPTER 37 MOVING OF STRUCTURES

SECTION 3701 GENERAL

3701.1 License required. No person shall own, maintain, conduct, operate or engage in the business of moving structures along, across or over any public street, alley, highway or other public place without holding a valid annual license issued by the *building official* to engage in the building mover's business.

Exceptions: No license is required if a permit exemption applies in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*.

SECTION 3702 LICENSE APPLICATION

3702.1 Application requirement. An applicant desiring to engage in the business of moving structures along, across or over a public street in the city shall file with the *building official* a written application on a form provided for that purpose, which shall be signed by the applicant or the applicant's authorized agent.

3702.2 Contents of application. The application shall contain:

- 1. The names, addresses and telephone numbers of the building moving company and all affiliated places of business and storage facilities;
- 2. The number and type of vehicles to be operated in connection with the business;
- 3. The name, address, telephone number and social security number of the building moving company; and
- 4. Proof of compliance with the insurance requirements of Section 3704.
- **3702.3 Surety bond.** The applicant shall also file with the *building official*, on a form furnished by the city, a surety bond by a surety acceptable to the city in the sum of not less than \$5,000 and as required by Section 3710.8. The bond shall protect the city from any costs, damages and suits that may result from the moving of any vehicle, equipment or load in the public right-of-way or from injury to any person or property, whether public or private, that may arise from the use of any street, alley or public place in the moving of any structure. The bond shall provide that 30 days written notice be given to the *building official* in the event of any material change or cancellation of the bond by the surety.
- **3702.4 Indemnification.** An applicant shall execute, and file with the *building official*, a written agreement to indemnify the city and its officers, agents and employees against all claims of injury or damage to persons or property, whether public or private, arising out of the moving of a structure.

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- **3702.5 Established place of business.** An applicant is required to maintain a regular and established place of business at a location where a building moving company is not prohibited by municipal ordinance and for which every license, tax permit and certificate of occupancy, if required by law, has been issued and is in force.
- **3702.6 Approval or denial of application.** When a complete application for a license or a license renewal has been filed with the *building official* in proper form, the *building official* shall, within a period of 30 days after the date of filing, approve or deny the application. If the application is denied, the *building official* shall send to the applicant by certified mail to the designated address shown on the application, return receipt requested, a written statement setting forth the reasons for the denial.
- **3702.7** Additional information. The *building official* may, at any time, require additional information of a licensee or an applicant related to an application.

SECTION 3703

FEE

3703.1 Fee. The annual fee for a building mover's license is \$260 for each moving company. The fee for issuing a duplicate license for one lost, destroyed or mutilated is \$25. Fees are payable to the *building official* upon issuance of a license. No refund of a fee will be made.

SECTION 3704 LICENSE ISSUANCE; EXPIRATION; NON-TRANSFERABILITY

- **3704.1 License qualifications.** The *building official* shall issue a license to engage in the business of moving structures to all applicants complying with the provisions of this chapter. No license authorizing the moving of structures on the streets of the city may be issued unless all requirements of this section are met.
 - **3704.1.1 Insurance.** The applicant shall procure and keep in full force and effect commercial general liability insurance and comprehensive automobile liability insurance written by an insurance company approved by the State of Texas and acceptable to the city and issued in the standard form approved by the Texas Department of Insurance. All provisions of the policy shall be acceptable to the city. The insured provisions of the policy shall name the city and its officers and employees as additional insureds. The coverage types and limits set forth in this section shall be maintained at all times during the term of the license.
 - **3704.1.1.1** Commercial general liability insurance. The commercial general liability insurance shall provide combined single limits of liability for bodily injury and property damage of not less than \$500,000 for each occurrence, or the equivalent, and include coverage for premises operations, independent contractors, products/completed operations, personal injury, contractual liability and medical payments.

- **3704.1.1.2** Comprehensive automobile liability insurance. The comprehensive automobile liability insurance shall provide combined single limits of liability for bodily injury and property damage of not less than \$500,000 for each occurrence, or the equivalent, for each motor vehicle used by the licensee.
- **3704.1.1.3 Cancellation provisions.** Each insurance policy shall include a cancellation provision in which the insurance company is required to notify the *building official* in writing not fewer than 30 days before canceling, failing to renew or making a material change to the policy.
- **3704.1.2 Indemnification agreement.** The applicant shall execute a written agreement to indemnify the city and its officers and employees against all claims of injury or damage to persons or property arising out of the moving of a structure by the licensee.
- **3704.1.3 Identification of structure, vehicles and equipment.** The name of the applicant shall be painted, stenciled or otherwise permanently affixed in clearly legible letters not less than 3 inches (76.2 mm) high on all structures being moved and on all vehicles, trailers, lowboys, beams or other equipment to be used.
- **3704.2 Expiration of license.** A building mover's license expires one year from the date of issuance.
- **3704.3 Nontransferability of license.** A building mover's license is not assignable or transferable.

SECTION 3705 LICENSE-DISPLAY, DUPLICATES, RENEWAL AND CHANGES

- **3705.1 License display.** Each license issued pursuant to this chapter shall be posted and kept in a conspicuous place in the building mover's establishment.
- **3705.2 License duplicates.** A duplicate license may be issued for one lost, destroyed or mutilated upon application on a form prescribed by the *building official*. Each duplicate license shall have the word "duplicate" stamped across its face.
- **3705.3 License renewal.** A licensee shall apply for renewal of a building mover's license at least 30 days before expiration of the license.
- **3705.4 Notification of changes.** Every licensee shall, within 10 days after a partial change of control in ownership or management, or a change of address or trade name, notify the *building official* of the changes. If complete ownership of a building moving company is changed, the new owner shall apply for a new building mover's license in accordance with Section 3702.

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REFUSAL TO ISSUE OR RENEW A LICENSE

3706.1 Refusal to issue or renew license. The *building official* shall refuse to issue or renew a building mover's license for any of the following reasons:

- 1. The making of any false statement as to a material matter in an application for a license or license renewal, or in a hearing concerning the license.
- 2. Conviction of the licensee, applicant or any employee while in the scope of employment with the licensee or applicant for a violation of this chapter.
- 3. Revocation of a license, pursuant to this chapter, of the applicant, or of any proprietor, partner or corporate officer in a building moving company, within one year preceding application unless the one year is specifically waived by the Building Inspection Advisory, Examining and Appeals Board.
- 4. Failure of the licensee to obtain the bond and insurance required by this chapter for a building mover's license.

SECTION 3707 LICENSE REVOCATION

3707.1 Grounds for revocation. The *building official* shall revoke a building mover's license for any one or more of the following reasons:

- 1. The making of any false statement as to a material matter in an application for a license or license renewal, or in a hearing concerning the license.
- 2. Conviction of the licensee, or any employee while in the scope of employment with the licensee, of a violation of Section 3701, 3704, 3710, 3711, 3712, 3713, 3714, 3715 or 3716.
- 3. Failure of the licensee to maintain the bond and insurance required by this chapter for a building mover's license.

3707.2 Notice of revocation. The *building official* shall send written notice of revocation to the licensee by certified mail, return receipt requested, setting forth the reason for, and the effective date of, the revocation.

SECTION 3708 APPEAL

3708.1 Appeal rights and procedures. If the *building official* refuses to approve the issuance of an original license or the renewal of a license to any applicant, or revokes the license issued to any licensee under this chapter, this action is final subject to the licensee's right, within 10 days after the receipt of written notice of the action, to file with the Building Inspection Advisory, Examining and Appeals board a written appeal. The *building official* shall cause all documents constituting the records upon which the action was appealed to be forwarded to the board. The hearing before the board shall be public and any interested party may appear in person, by agent or by legal counsel. The board shall, within 30 days after the appeal is filed, hear and consider all the evidence in support of or against the action appealed and render a decision either sustaining or reversing the action. The board shall have authority to sustain, reverse or modify the action appealed. The decision of the board is final as to administrative remedies in the city.

3708.2 Other remedies not affected by appeal. Nothing in this section is deemed to abolish or impair remedies of the city or its officers, agents or employees relative to the removal or demolition of any structure which is deemed to be dangerous, unsafe, unsanitary, unfit for human habitation, constructed or maintained in violation of the *Dallas Development Code*, or so located as to be a hazard to the traveling public or to constitute a public nuisance.

SECTION 3709 POWERS AND DUTIES OF THE BUILDING OFFICIAL

3709.1 General. In addition to the powers and duties elsewhere prescribed in this code, the *building official* is required to:

- 1. Administer and enforce all provisions of this chapter;
- 2. Keep records of all licenses issued or revoked; and
- 3. Adopt such rules and regulations, not inconsistent with this chapter, with respect to the form and content of applications for licenses, the investigation of applicants, and other matters incidental or appropriate to the *building official's* powers and duties that may be necessary for the proper administration and enforcement of this chapter.

SECTION 3710 PERMIT TO MOVE A STRUCTURE

3710.1 Permit required. The licensee shall obtain from the *building official* a separate permit for each move of a structure or portion of a structure along, across or over the public way, except that a single permit may be issued to authorize the moving of a structure in more than one piece, if all portions of the structure are moved at the same time. Permits for moving structures along the public ways may only be issued to licensed building movers.

3710.2 Permit application. Application for each permit shall be made on a form provided for that purpose. The moving permit fee required in Section 3716 shall accompany the application and, if applicable, the inspection fee required in Section 3711, and shall contain the following information:

- 1. A description of the structure to be moved.
- 2. The overall height, width and length of the structure.
- 3. The present location of the structure.
- 4. The location to which the structure is to be moved.
- 5. All other information that may be required.

3710.3 Other permits.

3710.3.1 Building permit and site plan. Except when a structure is moved to a location outside the city limits or to an approved temporary storage site, each application for a moving permit shall be accompanied by an application for a building permit, along with a site plan showing the location of the moved structure on the new site, signed by the owner of the site to which the structure is being moved, stating the use to which the structure is to be put, stating that the destination site is properly zoned for the proposed use and describing the work to be done to repair or remodel the structure.

3710.3.2 Requirements of building permit. The building permit shall require the following:

- 1. The structure shall be completely moved to the new site within 30 days after the date the moving permit is issued.
- 2. Work shall be started on the structure within 10 days after the date the structure arrives at the new site.
- 3. The structure shall be placed on an approved permanent foundation within 60 days after the date the moving permit is issued.
- 4. Within 100 days after the date the moving permit is issued, the exterior of the structure shall be made to comply with this code and all other applicable city ordinances and all exterior construction work shall be completed, including, but not limited to, the completion of all site work, paving, grading and site cleanup and the installation, repair and replacement of all siding, roofing, doors, windows, trim, paint, steps, porches and other work visible from the street or any neighboring property.
- 5. Completion of interior work on the structure shall proceed in compliance with other provisions of this code and other applicable city ordinances.

3710.3.3 Failure to comply. Failure to comply with the requirements of Section 3710.3.2 may result in the revocation of the building permit and the structure will then become subject to the provisions of Chapter 27, "Minimum Urban Rehabilitation Standards," of the *Dallas City Code*, as amended.

3710.4 Issuance, expiration and renewal.

3710.4.1 Issuance. Upon receipt of an application for a moving permit, the structure to be moved shall be inspected, and if it is found to be in conformity with, or can be made to comply with, the requirements of this code and other applicable ordinances, a moving permit shall be issued upon payment of the fee required by this chapter. A moving permit shall be issued for each move to the destination site. If moving of the structure will violate any provision of this chapter, the *building official* shall not issue the moving permit, and the structure may not be moved.

3710.4.2 Expiration. A moving permit expires two years after the date the permit is issued.

3710.4.3 Renewal. A moving permit may be renewed one time for a period not to exceed 30 additional days if written application by the building mover and payment of a \$100 renewal fee is received by the *building official* prior to the original permit expiration date. A moving permit that has expired may not be renewed except by application for a new permit and payment of all required permit fees.

3710.5 Temporary storage. A person who stores within the city a structure which has been moved from its original construction site to a location, without placing the structure on an approved foundation with anchorage and support, shall provide a solid fence or wall with plant screening surrounding the storage area which complies with provisions of the *Dallas Development Code* relating to storage of structures. This provision does not prohibit the location of new structures on bona fide sales lots displaying examples of workmanship and appearance of structures to be sold and constructed on individual remote sites.

3710.6 Unlawful acts not authorized by permit. The issuance or granting of a permit pursuant to this section does not authorize the violation of any provision of this code or other applicable ordinances. The issuance of a permit does not prevent the *building official* from requiring correction of errors or from preventing moving operations along the public ways which are in violation of this code or any other city ordinance, which violate or disturb the public peace, general welfare or public safety, or which create a nuisance.

3710.7 Removal of obstructions; time and route. Movements authorized by permit shall be made at the time and along the route specified by the *building official*. The granting of the permit does not authorize the cutting or removing of trees or branches or the adjustment of wires, utilities, signs, markers or public facilities. The mover shall give notice in the manner required by Section 3712.2 to the utility companies to remove the meters and public utility facilities prior to moving.

3710.8 Bond required. The owner of the structure to be moved or of the site to which the structure is being moved shall, upon application for a permit to move a structure, file with the *building official* a cash bond, or a surety bond by a surety acceptable to the city, to cover the city's costs of bringing the site to which a structure has been moved back to its original state should any exterior work on the site or structure not be completed in compliance with the time schedule set forth in Section 3710.3.2. The amount of the bond required is equal to \$1 for each square foot of structure being moved, measured from the structure's exterior, or \$10,000, whichever is greater. Action by the city that is covered by the bond may include, but is not limited to, demolition or removal of the structure. A surety bond shall provide that 30 days' written notice be given to the *building official* in the event of any material change in or cancellation of the bond by the surety.

Exception: The bond requirements do not apply if a structure is being moved to property owned by the federal or state government or a political subdivision of the state.

SECTION 3711 PREMOVE INSPECTIONS

3711.1 Request for inspection and payment of fees. A person moving a structure to a lot located within the city shall request an inspection from the *building official* and pay all applicable fees required by Section 303 of Chapter 52 of the *Dallas City Code* at least five business days before the move is scheduled.

Exception: Industrialized building or housing units that maintain a current certification as an industrialized structure by the State of Texas shall not be assessed a pre-move inspection fee.

3711.2 Inspection. If the *building official* determines from inspection that a structure requested to be moved is in compliance with, or can be made to comply with, this code and all other applicable city ordinances and authorizes the structure to be moved into the city, the structure shall be moved within 90 days from the date of inspection or another inspection fee will be required.

3711.3 Moving structures through the city. A structure may be moved through the city from outside the city limits, if the destination site is outside the city, either pursuant to a Texas State Highway Department permit, if the move is over state or federal highways, or otherwise pursuant to the provisions of this chapter.

SECTION 3712 WEIGHT AND SIZE REGULATIONS

3712.1 Width. The total width, including eaves, porches or other overhang, of any structure to be moved shall not exceed the width of any street, measured from normal curb alignment to normal curb alignment at any place along the route unless the mover obtains written approval of the *building official*. The width, length or height permitted to be moved may be reduced by the *building official* on the basis of traffic volume, geometrics of the route, or length of the move in terms of distance and time. The applicant shall investigate the route and provide for proper clearance along the route.

- 3712.2 Height. The total height of any structure to be moved shall not exceed 17½ feet (5334 mm) in height when loaded unless the mover gives evidence to the *building official* that the utility companies have received written notice of the move of an over height structure at least five business days before the scheduled move of a structure not exceeding 21 feet (6400 mm) in height and at least 15 business days before the scheduled move of a structure exceeding 21 feet (6400 mm) in height.
- **3712.3 Weight.** The total weight of the vehicle and load shall not exceed the maximum weight limits, which are provided in Chapter 28 of the *Dallas City Code*, as amended.
- **3712.4 Moving structures on bridges, underpasses and similar facilities.** No person shall operate any vehicle, including its load, over or on any bridge or through any underpass or similar facility unless the height and width of the vehicle and load is less than the vertical and horizontal clearance of the facility.
- **3712.5** Moving operations to comply with state law. Moving operations shall meet all requirements of the *Texas Transportation Code*, as amended, including the display of side or clearance flags and lights when and where required.

SECTION 3713 MOVING A STRUCTURE

- **3713.1 How movement is to be made.** The moving of a structure shall be conducted expeditiously and without unnecessary obstruction of the public way. If the vehicle or equipment becomes disabled so that normal operation is impossible or impractical, the person in charge of the moving shall have the vehicle and equipment, with loads, immediately removed to a temporary parking area off the traveled roadway and notify the *building official* of the inability to complete the move and of the temporary storage location of the structure. The vehicle and equipment shall be immediately restored to operating condition, the move rescheduled, and the vehicle and equipment escorted to the destination.
- **3713.2 Parking, standing or storage prohibited.** The *building official* is authorized to remove, or have removed, any vehicle, equipment or load left parked or standing by a mover on any portion of the public right-of-way or other temporary storage place when the mover fails to remove the encroachment within a reasonable time. All costs incurred will be charged to the mover. No further permits shall be granted to the mover until the encroachments have been removed and the costs have been paid. Failure to pay the costs will result in recovery of the costs from the mover's surety bond filed pursuant to Section 3702.3.

SECTION 3714 ESCORT REQUIRED

3714.1 Escort required. No person shall move any structure for which a permit is required by this chapter along, across or over any public way within the city unless accompanied by an escort who is approved by the *building official* and who has authority to direct traffic and exercise other police powers.

3714.2 Distribution or moving permit copies. The building mover shall provide the escort a copy of the moving permit. When the moved structure has been placed at its final location, the building mover shall mark a copy of the moving permit with the date and time the move is completed and shall return the copy to the *building official* within three working days.

3714.3 Escort fee. The escort fee is determined by the mover and the escort and is in addition to the moving permit fee.

SECTION 3715 CLEANUP OF SITE FROM WHICH STRUCTURE IS REMOVED

3715.1 Requirements for clearing site. Within 30 days after a structure is removed from a lot or tract of land within the city, the lot or tract of land shall be cleaned by the mover or owner of the lot and left free from any unsafe, hazardous or unsanitary condition. All debris, rubbish and waste material resulting from the moving shall be removed from the site. All portions of the structure, appurtenances and incidental accessory structures remaining after the removal of the structure shall be demolished, after obtaining a demolition permit pursuant to Chapter 40, by the mover or owner of the lot to grade level, including all wood, brick and concrete foundation and concrete elements such as porches, slabs and steps which have portions above the grade. The mover or owner of the lot shall leave the site blade clean and compact, level and smooth all basements, cellars, wells, cisterns, excavations, holes or depressions which extend below the grade of the site and are apparent as a consequence of the moving. The mover or owner of the lot shall plug air and watertight sewer laterals, house lines and any other sewer and plumbing connections.

3715.2 Letter of intent to clear site. The mover shall file, with the application for a permit, a letter of intent to clear the lot, signed by the mover and the owner of the lot from which the structure is to be removed. Failure of the mover or owner of the lot to clear the lot as required in Section 3715.1, and in compliance with the submitted letter of intent, is a violation of Section 3715.

SECTION 3716 MOVING PERMIT FEES

- **3716.1 Moving permit fees.** In addition to filing an application for a permit to move a structure as provided in this chapter, the applicant shall pay all applicable fees required by Section 303, Chapter 52 of the *Dallas City Code*. A permit and accompanying fee is required for each move and, notwithstanding any other provisions of this code, no organization or agency is exempt from this fee.
- **3716.2 Other fees.** Nothing in this section will relieve any person from the payment of any other fee required by other city ordinances or regulations.
- **3716.3** Ad valorem taxes to be paid. A moving permit shall not be issued until the city tax assessor and collector has determined that ad valorem taxes on the property concerned have been paid."

170. The 2021 International Building Code is amended by adding a new Chapter 38,

"Fencing," to read as follows:

"CHAPTER 38 FENCING SECTION 3801 HEIGHT

3801.1 General. Fences shall not exceed the height provided in the *Dallas Development Code*.

SECTION 3802 STRENGTH

3802.1 General. Fences shall be of sufficient strength to support their own dead load and to resist overturning. Fences over 9 feet (2743.2 mm) in height shall be designed as structures and have plans and specifications prepared by an engineer registered in the State of Texas.

SECTION 3803 VISIBILITY OBSTRUCTION PROHIBITED

- **3803.1 General.** No fence may be erected or maintained in a manner so as to be a visibility obstruction as defined in the *Dallas Development Code*."
 - 171. The 2021 International Building Code is amended by adding a new Chapter 39,

"Tents," to read as follows:

"CHAPTER 39 TENTS

SECTION 3901 SCOPE

3901.1 Scope. This chapter applies only to a tent used for temporary operations. A tent or other fabric or membrane structure or portion of a structure intended to be in place permanently shall comply with the provisions of this code regulating permanent buildings and structures.

SECTION 3902 DEFINITIONS

3902.1 Definitions. The following terms used in this chapter shall have the meanings as defined in Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*:

PREMISES.

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TENT.

SECTION 3903 PERMIT REQUIREMENTS FOR TENTS

- **3903.1 Offense.** A person commits an offense if he erects or maintains a *tent* covered by this chapter without having a valid *tent* permit issued by the *building official*.
- **3903.2 Permit required.** A permit is required in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*.
- **3903.3 Application.** An application is required in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*.
- **3903.4 Issuance of permit.** The conditions of permit issuance shall be in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*.

SECTION 3904 USE CONDITIONS

- **3904.1 Compliance with other laws.** The use and placement of a *tent* and all operations within a *tent* shall comply with all city ordinances and other applicable laws.
- **3904.2 Privilege.** The granting of a *tent* permit is a privilege that may be revoked at any time upon violation of any provision of this chapter.
- **3904.3 Other permits.** Electrical permits, plumbing permits, mechanical permits, food establishment permits, alcoholic beverage licenses and all other permits and licenses required by city ordinance or other law shall be applied for separately in accordance with the applicable ordinance or law.
- **3904.4 Placement.** Every part of a tent, including guy wires, deadmen, stakes and equipment, shall be set back a minimum of 10 feet (3048 mm) from all property lines and adjacent buildings and shall comply with all building lines and minimum yard areas as required by the *Dallas Development Code*.
 - **Exception:** *Tents* complying with the location provisions of Section 3103.8 of the *Dallas Fire Code* in addition to the requirements of the *Dallas Development Code*.
- **3904.5 Lot coverage.** No *tent* may be erected to cover more than 75 percent of the *premises* on which it is located.
- **3904.6 Structural requirements.** All supporting members shall be of sufficient size and strength to adequately support the *tent*. The supporting members shall be guyed and braced to withstand a wind pressure of not less than 20 pounds per square foot of the projected area of the *tent*.

- **3904.7** Nuisances. Loud speakers or amplifiers, when used, shall not be used so as to create a nuisance as described in the city ordinances and other applicable laws.
- **3904.8 Electricity.** All electrical wiring shall comply with the *Dallas Electrical Code*. Each *premises* on which a *tent* is to be erected shall be provided with a separate, individual electrical service from the power source.
- **3904.9 Construction.** Each *tent* shall be constructed of flame-resistive materials as specified in the *Dallas Fire Code*.
- **3904.10 Parking.** The number of parking spaces for a *tent* shall be provided in accordance with the *Dallas Development Code*.

Exception: A *tent* that is on the same lot as and is accessory to a main use need not be provided with additional parking.

SECTION 3905 EXITS

- **3905.1 General requirements.** Arrangement of seats, aisles, passageways and exits shall conform to Chapter 10.
- **3905.2** Additional requirements. Every *tent* shall be provided with exits meeting all of the following additional provisions contained in this section.
 - **3905.2.1 Line of travel.** The line of travel to an exit shall not be greater than 100 feet (30 480 mm).
 - **3905.2.2 Height.** The height of doors, aisles or passageways may be no less than 7 feet (2133.6 mm).
 - **3905.2.3 Obstructions.** No stakes, guy wires or guy ropes may obstruct an exit way.
 - **3905.2.4 Exit openings.** Exit openings from any *tent* shall remain open or may be covered by canvas, provided:
 - 1. The coverings are free-sliding on a proper support, and the support shall not be less than 12 inches (304.8 mm) above the top of the opening;
 - 2. The coverings shall be so arranged that, when open, no part of the coverings obstruct the opening; and
 - 3. The coverings shall be of a color or colors that definitely contrast with the color of the *tent*.
- **3905.2.5 Lighting.** Exits, aisles and passageways leading to exits shall be adequately lighted at all times when the structures are occupied. Artificial light shall be provided whenever natural light is inadequate.

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- **3905.2.6 Exit signs.** Signs reading "EXIT" in red letters on a white background or in other approved distinguishable colors shall adequately indicate exit doorways. Sign letters shall be at least 6 inches (152.4 mm) high and not less than ¾ inch (19.05 mm) wide. Exit signs shall be illuminated in *tents* with occupant loads over 100 persons in the manner specified below:
 - 1. Two separate electrical sources are required for occupant loads over 600.
 - 2. Two separate electrical circuits, one of which shall be separate from other circuits, are required for occupant loads of 600 or less.

SECTION 3906 CLEARANCE OF PREMISES

- **3906.1 General.** The operator of *premises* for which a *tent* permit has been issued shall remove all structures, materials and debris within two days after the expiration or revocation of a *tent* permit."
- 172. The 2021 International Building Code is amended by adding a new Chapter 40,

"Demolition of Structures," to read as follows:

"CHAPTER 40 DEMOLITION OF STRUCTURES

SECTION 4001 SCOPE

4001.1 Scope. All demolition of structures or portions of structures shall be in accordance with this chapter.

SECTION 4002 DEFINITIONS

4002.1 Definitions. The following terms used in this chapter shall have the meanings indicated in this section:

CONTRACTOR. A person, and any employees, engaged in the business of demolition of structures, who have contracted to demolish a particular structure.

DEMOLITION. The destruction of a structure or part of a structure.

INSECTS. Include cockroaches, fleas, ticks and bloodsucking insects that transmit disease to warmblooded creatures, but excluding subterranean termites.

SECTION 4003 DEMOLITION PERMIT REQUIRED; FEE EXEMPTION

4003.1 Permit required. A person shall not demolish or begin *demolition* of a structure without obtaining a *demolition* permit from the *building official*.

4003.2 Fees. Before being issued a *demolition* permit, the applicant shall pay all applicable fees required by Section 303 of Administrative Procedure for the Construction Codes of the Dallas City Code.

SECTION 4004 PERMIT APPLICATION

4004.1 General. Application for a *demolition* permit signed and verified by the owner or owner's agent shall be made to the *building official* on a form provided for the purpose and shall include all of the following information:

- 1. Location of the structure to be demolished.
- 2. A plan for demolition and a schedule of time to complete the demolition project.
- 3. Location of the sites to be used for disposal of debris and proposed routes for transport of the debris to the sites.
- 4. Name and address of the owner of the structure and the notarized signature of the owner or the owner's agent authorizing the *contractor* to obtain a permit for *demolition* of the structure.
- 5. Name and address of the *contractor*:
- 6. Documentary evidence from an insurance company authorized to do business in the State of Texas, indicating a willingness to provide liability insurance required by Section 4010.
- 7. A statement that the abatement of asbestos hazards will be accomplished in accordance with guidelines and procedures established by the department of environmental and health services of the city.

8. Such additional information as the *building official* considers necessary to promote the implementation or enforcement of this chapter or the protection of the public safety.

SECTION 4005 REVIEW OF PERMIT APPLICATION; RODENT OR INSECT INFESTATION; DEMOLITION REVIEW COMMITTEE; SPECIAL CONDITIONS

- **4005.1 Rodent or insect infestation.** If the *building official* determines that the structure is infested with rodents or *insects*, the *building official* shall require the structure to be treated to eliminate the infestation before issuing a permit.
- **4005.2. Review of permit application.** If the *building official* determines from the application that, because of the scope of the proposed *demolition* project, further review is necessary, the *building official* may call a meeting of the *demolition* review committee. The *building official* shall give the committee members, the owner of the property and the *contractor* at least three days' written notice of the meeting unless the *contractor* requests an earlier meeting.
- **4005.3 Demolition review committee.** The *demolition* review committee is composed of the *building official* as chair and the directors or designated representatives from the following city departments:
 - 1. Department of code compliance.
 - 2. Department of sanitation services.
 - 3. Fire department.
 - 4. Mobility and Street Services Department or its equivalent.
 - 5. Office of Environmental Quality.
 - 6. Police department.
- **4005.4 Hearing.** The *contractor* and the owner, or the owner's representative other than the *contractor*, shall attend the meeting of the *demolition* review committee and explain in detail the methods and procedures to be used in the proposed *demolition* project.
- **4005.5 Special conditions.** After reviewing the application and hearing the presentation of the *contractor*, the *demolition* review committee shall determine if, for the protection of the public safety, any special conditions need to be required for the issuance of a permit. At the conclusion of the meeting, the special conditions, if any, shall be listed and recorded so that they may be made a part of the permit.

SECTION 4006 PERMIT ISSUANCE; APPEAL OF DENIAL

4006.1 Issuance of permit. The *building official* shall issue a *demolition* permit to the applicant, incorporating any special conditions as part of the permit, if the *building official* determines that:

- 1. The applicant has complied with the requirements of Sections 4003, 4004 and 4005;
- 2. The applicant has submitted proof of the insurance coverage required by Section 4010;
- 3. The methods and procedures to be used by the applicant will comply with the requirements of this chapter and will not present a hazard to the public; and
- 4. The applicant has agreed to comply with the special conditions, if any, determined to be necessary by the *demolition* review committee.

4006.2 Appeal of denial. If the *building official* denies issuance of a permit, the applicant may appeal the action to the Building Inspection Advisory, Examining and Appeals board under procedures established in Chapter 52, Administrative Procedures for the Construction Codes, of the *Dallas City Code* for appeals to that board.

SECTION 4007 TRANSFERABILITY; COMMENCEMENT OF WORK; CONTINUATION OF WORK; DURATION OF PERMIT; EXTENSION

- **4007.1 Transferability.** A *demolition* permit is not transferable to another.
- **4007.2** Continuation of work. After beginning a *demolition* project, a *contractor* or owner shall work continuously at the normal rate of progress in keeping with good *demolition* practices until the project is completed.
- **4007.3 Expiration of permit to demolish smaller structures.** A permit issued for *demolition* of a structure of less than 500 square feet (46.45 m²) or a single-family or duplex dwelling expires two years after the date of issuance if no progress has been made toward completion of the *demolition*, and *demolition* work authorized by the permit, including cleanup, shall be completed within the 30 days of the date *demolition* commences.
- **4007.4** Expiration of permit to demolish larger structures. A permit issued for *demolition* of a structure other than a structure described in Section 4007.3 [4007.4] expires two years [60 days] after the date of issuance if no progress has been made toward completion of the *demolition* unless a longer period of time is granted in the permit as a special condition approved by the *demolition* review committee. *Demolition* work, including cleanup, authorized by the permit shall be completed within 60 days of the date *demolition* commences or within the time stated in the special condition.

4007.5 Extensions of permit. The *building official* may grant an extension of a *demolition* permit if the *contractor* or owner shows good cause for not completing the project within the required time.

SECTION 4008 OTHER PERMITS

4008.1 General. Issuance of a *demolition* permit does not authorize an activity which requires another permit, as illustrated by, but not limited to, welding, cutting with a torch, construction of pedestrian protections and hauling of debris. The requirement of other permits may be discussed with the *contractor* at the demolition *review meeting*.

SECTION 4009 COST FOR CHANGES IN PUBLIC PROPERTY; EQUIPMENT OR UTILITIES

4009.1 General. The owner of property to be demolished is responsible for the cost of changes in public property, equipment or utilities, including, but not limited to, damage caused by the *demolition* activity, removal and reinstallation if damage cannot be avoided, and temporary equipment or utilities if determined to be necessary by the *building official* or the *demolition* review committee.

SECTION 4010 INSURANCE; INDEMNIFICATION

4010.1 Insurance required. An applicant for a *demolition* permit shall procure and keep in full force and effect commercial general liability insurance and comprehensive automobile liability insurance written by an insurance company approved by the State of Texas and acceptable to the city and issued in the standard form approved by the Texas Department of Insurance. All provisions of the policy shall be acceptable to the city. The insured provisions of the policy shall name the city and its officers and employees as additional insureds.

Exception: Insurance is not required if the structure to be demolished is less than 500 square feet (46.45 m²) in area, and the *demolition* will not affect public property.

4010.1.1 Coverage requirements. The following coverage types and limits shall be maintained at all times during the term of the *demolition* permit:

- 1. The commercial general liability insurance shall provide combined single limits of liability for bodily injury and property damage of not less than \$1,000,000 for each occurrence, or the equivalent, and include coverage for premises operations, asbestos hazards (if the project involves asbestos), independent *contractors*, products/completed operations, personal injury, contractual liability and medical payments. This insurance shall also include coverage for underground, explosion and collapse hazards.
- 2. The comprehensive automobile liability insurance shall provide combined single limits of liability for bodily injury and property damage of not less than \$500,000 for each occurrence, or the equivalent, for each motor vehicle used by the permittee.

Exception: If the *building official or* the *demolition* review committee determines that public property will not be affected by the project and the scope of the project is not sufficient to require the insurance limits established in Section 4010.1.1, the *building official* or the *demolition* review committee, on recommendation of the office of risk management, may lower the limits required for a particular permit and include the lower limits as a special condition incorporated into the permit.

- **4010.1.2 Cancellation provisions.** Each insurance policy shall include a cancellation provision in which the insurance company is required to notify the *building official* in writing not fewer than 30 days before canceling, failing to renew or making a material change to the insurance policy.
- **4010.2 Indemnification required.** A permittee shall execute a written agreement to indemnify the city and its officers and employees against all claims of injury or damage to persons or property arising out of *demolition* activities by the permittee that affect public property.

SECTION 4011 DEMOLITION BY CITY

4011.1 Inapplicability of certain requirements. Sections 4007, 4009 and 4010 do not apply to *demolition* work conducted by city employees in the course of their city employment.

SECTION 4012 PREPARATION OF THE DEMOLITION SITE

- **4012.1 Site preparation requirements.** A *contractor* shall not begin *demolition* work until all of the following preparations have been made:
 - 1. Relocate gas, water, steam, storm and sanitary sewer lines that will be used during the *demolition* process and construct devices to protect the relocated lines.
 - 2. Shut off and cap accessible gas, water, steam, storm and sanitary sewer lines not required during *demolition* outside the building line and shut off other lines as they become accessible.
 - Reduce electrical service connections to a minimum needed for the *demolition* work and relocate and protect needed lines.
 - 4. Disconnect unneeded electrical service lines outside the property line and conspicuously identify energized circuits.
- **4012.2 Notification to utility agencies.** A *contractor* shall notify the appropriate utility agency before making the preparations required in Section 4012.1 and shall accomplish the disconnections and construction of protective devices in a manner approved by that agency.

SECTION 4013 PROTECTIVE DEVICES

- **4013.1 Protective devices.** A *contractor* shall not begin *demolition* of the exterior walls or roof of a structure until the following protective devices have been constructed when required by the *demolition* review committee:
 - 1. A walkway or pedestrian protection in compliance with Section 3306; and
 - 2. A structure to protect public property and utilities, as illustrated by, but not limited to, fire hydrants, street lights, signal lights and control boxes, parking meters, utility lines and poles, and traffic signs.
- **4013.2 Fencing and security.** If the *demolition* review committee determines it is necessary, a special condition to the permit may require a fence enclosing the *demolition* site and a security guard to be kept on duty 24 hours a day.
- **4013.3 Maintenance and removal of protective devices.** A *contractor* shall maintain the required protective devices so long as a hazard to persons or property exists and shall remove the devices immediately when they are no longer needed for protection.
- **4013.4 Means of egress.** A party wall balcony or horizontal exit shall not be destroyed unless and until a substitute means of egress has been provided and approved.
- **4013.5 Water accumulation.** Provision shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property.

SECTION 4014 WARNING SIGNS AND BARRICADES

4014.1 General requirements. A *contractor*, when required by the *demolition* review committee, shall prominently erect and maintain, while the *demolition* is in progress, signs and barricades which comply with the city's traffic barricade manual and warn members of the public of the hazards that exist as a result of the *demolition* work.

SECTION 4015 LIGHTS

4015.1 General requirements. A *contractor* shall provide lights between sunset and sunrise that illuminate hazards near or upon sidewalks or streets, as illustrated by, but not limited to, pits, excavations, fences, barriers, equipment, building material or rubbish.

4015.2 Pedestrian passageways. In pedestrian passageways, a contractor shall provide:

- 1. Amber lights with a capacity of at least 100 watts on the street side of the walkway at both ends and near the center; and
- 2. Sixty-watt lights spaced every 10 feet (3048 mm) along an open walkway and along the inside and outside of a covered pedestrian way.

SECTION 4016 DUST AND DRAINAGE

4016.1 Dust. In order to control dust in the air, a *contractor shall* do the following:

- 1. Maintain an adequate water supply on the *demolition* site to properly control dust.
- 2. Wet down material sufficiently to lay the dust before the material is removed.
- 3. Remove asbestos in accordance with applicable city, state and federal laws and regulations.

4016.2 Drainage. A *contractor* shall maintain the drainage facilities so that storm water and water used for controlling dust will not cause flooding of streets, sewers or other property.

SECTION 4017 HOURS OF OPERATION

4017.1 Residential areas. A *contractor* shall conduct *demolition* activity on a structure in or adjacent to a residential area only during the days and hours specified in Chapter 30, "Noise," of the *Dallas City Code*.

4017.2 Nonresidential areas. The *building official* or the *demolition* review committee shall establish the hours of operation at *demolition* sites not in or adjacent to a residential area to minimize the effect of noise and the interference with normal movement of pedestrians and vehicular traffic. The established hours of operation will be incorporated as a special condition of the permit.

SECTION 4018 METHODS OF DEMOLITION

4018.1 General method. In conducting *demolition* activities, a *contractor* shall do the following:

- 1. Demolish exterior walls and floor construction beginning at the top of the structure and proceeding downward, except that holes may be cut in floors through which to drop materials if precautions are taken so that dropped materials are contained and dust is controlled.
- 2. Completely demolish each story of exterior wall and floor construction and dispose of all materials and debris by moving to a storage space before beginning removal of walls and floors in the next story below.
- 3. Floor over or enclose with guardrails and toe boards all floor openings and shafts not used for material chutes.
- 4. During the *demolition* of a structure that is originally more than 70 feet (21 336 mm) high and that is in proximity to property lines, provide scatterboards not more than two stories below the story being removed. These scatterboards shall:
 - 4.1. project from the exterior of the structure not less than 6 feet (1828.8 mm);
 - 4.2. be designed for a live load of 100 pounds per square foot (488.24 kg/m²) for a distance of 5 feet (1524 mm) from the wall line;
 - 4.3. be floored with at least 2-inch (50.8 mm) thick plank, laid tight and secured; and
 - 4.4. have solid plank guardrails 3 feet (914.4 mm) in height, rigidly braced and secured on the outer edge and ends.
- 5. Reduce all improvements to their component parts and demolish all improvements to ground level, including, but not limited to, foundations, porches, walks, driveways, slabs and steps which have elements above grade.

4018.2 Other methods. If a *contractor* desires to use a method other than that required in Section 4018.1, as illustrated by, but not limited to, *demolition* of a structure in sections, use of explosives, or use of "headache balls," the proposed method must be approved by the *building official* or the *demolition* review committee to ensure the safety of persons and property, with appropriate special conditions incorporated in the permit.

SECTION 4019 DROPPING OF MATERIAL

4019.1 General requirements. A *contractor* shall not drop material by gravity to a point outside the exterior walls of a structure unless the material is dropped through an enclosed wooden or metal chute.

Exceptions: This restriction does not apply to the following:

- 1. A single-family dwelling and its accessory structures.
- 2. A structure whose height is less than the distance from the building line to the nearest property line or public sidewalk.

SECTION 4020 FIRE PROTECTION

4020.1 General requirements. For requirements governing fire protection at a *demolition* site, see the *Dallas Fire Code*.

SECTION 4021 REMOVAL OF MATERIAL

4021.1 General requirements. A *contractor* shall remove all material, rubbish and debris at least once each day from the *demolition* site in accordance with applicable city, state and federal laws and regulations, and in accordance with the routes, disposal sites and precautions established by the *building official* or the *demolition* review committee, taking care to maintain adjacent streets, alleys and public ways clear of loose material.

SECTION 4022 CONDITION OF THE DEMOLITION SITE

4022.1 Site condition upon completion of demolition. Upon completion of a *demolition* project, a *contractor* shall:

- 1. Leave the *demolition* site blade clean; and
- 2. Fill, level, compact and smooth basements, cellars, wells, cisterns, excavations, holes, voids under public or private sidewalks, or any declivity or depression that extends below the grade of the lot and is an apparent consequence of the *demolition*.

Exception: A *contractor* is not required to fill, level, compact and smooth the *demolition* site if a building permit has been issued for new construction on the site, to begin within 60 days of completion of the *demolition* project.

- **4022.2 Inert material as fill.** Inert material may be used as fill if the top 1 foot (304.8 mm) of fill is clean earth.
- 4022.3 Shrubbery and trees. Living shrubbery and trees are not required to be removed from the site."
 - 173. The 2021 International Building Code is amended by adding a new Chapter 41,

"Building Security," to read as follows:

"CHAPTER 41 BUILDING SECURITY

SECTION 4100 PURPOSE

4100.1 General. The purpose of this chapter is to establish minimum standards to make dwelling units resistant to unlawful entry.

SECTION 4101 SCOPE

- **4101.1 General.** The provisions of this chapter apply to the following openings:
 - 1. Openings into dwellings within apartment houses of Group R, Division 2 Occupancies.
 - 2. Openings into a dwelling and dwelling units of Group R, Division 3 Occupancies.
 - 3. Openings between attached garages and the dwelling units.
 - 4. Openings into attached garages.

Exceptions:

- 1. An opening in an exterior wall when all portions of the opening are more than 12 feet (3656.6 mm) vertically or 6 feet (1826.8 mm) horizontally from an accessible surface of any adjoining yard, court, passageway, public way, walk, breezeway, patio, planter, porch or similar area.
- 2. All openings in an exterior wall when all portions of the opening are more than 12 feet (3656.6 mm) vertically or 6 feet (1826.8 mm) horizontally from the surface of any adjoining roof, balcony landing, stair tread, platform or similar structure, or when any portion of such surface is more than 12 feet (3656.6 mm) above an accessible surface.
- 3. All openings in a roof when all portions of such roof are more than 12 feet (3656.6 mm) above an accessible surface.

- 4. An opening where the smaller dimension is 6 inches (152.4 mm) or less, provided that the closest edge of the opening is at least 40 inches (1016 mm) from the locking device of a door.
- 5. An opening protected by required fire door assemblies having a fire-endurance rating of not less than 45 minutes.

SECTION 4102 OBSTRUCTING MEANS OF EGRESS

- **4102.1 General.** Security methods shall not create a hazard to life by obstructing any means of egress or any opening that is classified as an emergency exiting facility. Security provisions contained in this chapter do not supersede or waive the safety provisions relative to latching or locking devices on means of egress doors or egress windows required by any other provision of this code.
- **4102.2** Emergency escape or rescue windows. Bars, grilles, grates or similar security or secondary locking devices may be installed on emergency escape or rescue windows or doors required by Section 1031 of this code and Section R310 of the *Dallas One- and Two-Family Dwelling Code*, provided the following:
 - 1. Such devices are equipped with approved release mechanisms that are operable from the inside without the use of a key or special knowledge or effort.
 - 2. The building is equipped with smoke detectors installed in accordance with Section 907.2, 1103.7 and 1103.8 of the *Dallas Fire Code* and Section R314 of the *Dallas One- and Two-Family Dwelling Code*.

SECTION 4103 ENTRY VISION

- **4103.1 Vision required.** All main or front entry doors to dwelling units shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. Except as provided in Section 716.2.2.1, the view may be provided by a door viewer having a field of view of not less than 180 degrees or through a window or view port.
- **4103.2 Glazing separation.** Breakable glass should not be installed within 40 inches (1016 mm) of a door-locking device.

Exceptions:

- 1. For required means of egress doors and emergency escape or rescue doors, glazing may be installed within 40 inches (1016 mm) of the locking device if the glass is laminated, patterned, wired, obscured or protected by approved bars, grilles or grates.
- 2. For other doors, glazing may be installed within 40 inches (1016 mm) of a locking device that is key-opened from both the inside and the outside.

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SECTION 4104 SWINGING DOORS

- 4104.1 General. Swinging doors regulated by this chapter shall comply with the following:
 - 1. Wood doors shall be solid core and not less than $1^3/_{8}$ -inches (34.92 mm) thick.
 - 2. Double doors shall have the inactive leaf secured by header and threshold bolts that penetrate metal strike plates. The bolts shall be flush-mounted in the door edge whenever breakable glass is located within 40 inches (1016 mm) of the bolts.
 - 3. Dutch doors shall have concealed flush-bolt locking devices to interlock the upper and lower halves.
- **4104.2 Strike plate installations.** In wood-frame construction, any open space between trimmers and wood doorjambs shall be solid-shimmed by a single piece extending not less than 6 inches (152.4 mm) above and below the strike plate.

Strike plates shall be attached to wood with not less than two No. 8 by 2-inch (50.8 mm) screws. Strike plates when attached to metal shall be attached with not less than two No. 8 machine screws.

- **4104.3 Hinges.** Hinges that are exposed to the exterior shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins.
- **4104.4 Locking hardware.** Single swinging doors and the active leaf of double doors shall be equipped with an approved exterior key-operated dead bolt which shall lock with a minimum bolt throw of 1 inch (25.4 mm) through a metal strike plate. When mounted on an exit door or a required emergency escape or rescue door, the dead bolt lock shall be operable from the inside without the use of a key or any special knowledge or effort. See Chapter 10 for other exit door requirements.

SECTION 4105 WINDOWS AND SLIDING DOORS

- **4105.1 General requirements.** When regulated by this chapter, openable windows and sliding door assemblies shall be secured by a primary lock or sash operator and by either of the following:
 - 1. A secondary locking device consisting of screws, dowels, pinning devices or key-operated locks designed to prevent opening by lifting or prying.
 - 2. Approved bars, grilles or grates.

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Jalousie or louvered windows do not comply with this section unless protected with approved bars, grilles or grates. Installation of secondary locking devices or bars, grilles or grates on required emergency escape windows or doors shall comply with Section 1030.4.

SECTION 4106 GARAGE DOORS

4106.1 General requirements. Vehicle access doors in enclosed attached garages shall be equipped with a security device or locking devices.

SECTION 4107 ALTERNATE MATERIALS OR METHODS

- **4107.1 General.** The provisions of this chapter are not intended to prevent the use of any material, device, hardware or method not specifically prescribed in this chapter, when such alternate provides equivalent security and is approved by the *building official*."
- 174. The 2021 International Building Code is amended by adding a new Chapter 42, "Unity Agreements and the Dissolution of Common Boundary Lines for Building Code Purposes," to read as follows:

"CHAPTER 42 UNITY AGREEMENTS AND THE DISSOLUTION OF COMMON BOUNDARY LINES FOR BUILDING CODE PURPOSES

SECTION 4201 AUTHORIZATION AND REQUIREMENTS FOR UNITY AGREEMENTS

4201.1 Authorization. The *building official* may authorize the use of a unity agreement between two or more building sites to include the reservation of additional *yard* space on an adjacent building site for purposes of this code if a written agreement is executed in accordance with this section on a form provided by the city.

Exception: The *building official* may authorize the use of a unity agreement for purposes of this code without the execution of a written unity agreement when the city is an owner or lessee of all of the property involved.

4201.1.1 Creation of a building site. The unity agreement may not be used to create a building site nor as a substitute for platting or replatting as required by the *Dallas Development Code*. This agreement shall not be used to allow buildings or portions thereof to encroach across the property line nor into the adjacent lot.

- **4201.1.2 Newly created building site and existing buildings.** Property lines cannot be created unless the structures are compliant or will be made compliant with the requirements of this code following the permit requirements of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*. A property line proposed through an existing building must result in functionally independent structures on each side of the property line. This includes structural load paths as well as all other requirements of this code including exits and restrooms.
- **4201.1.3 Single-family uses.** A site inspection is required prior to the submission of the unity agreement for the building official's signature. The inspection must verify the existence of the designated minimum yard on the adjacent lot.

4201.2 Requirements. A unity agreement shall meet all of the following requirements:

- 1. Contain legal descriptions of the properties sharing the common boundary lines.
- 2. Set forth adequate consideration between the parties.
- 3. State that all parties agree that the properties sharing the common boundary lines may be collectively treated as one lot for the limited purpose of meeting requirements of this code.
- 4. State that the reservation of additional yard space on an adjacent building site described in the agreement is only for the limited purpose of meeting requirements of this code, and that actual lot lines of the building sites are not affected.
- 5. State that the agreement constitutes a covenant running with the land with respect to all properties sharing the common boundary lines. A maximum of two lots may be used per agreement.
- 6. State that all parties agree to defend, indemnify, and hold harmless the city of Dallas from and against all claims or liabilities arising out of or in connection with the agreement.
- 7. State that the agreement will be governed by the laws of the State of Texas.
- 8. State that the agreement may only be amended or terminated in accordance with Section 4202.
- 9. Be approved by the *building official* and be approved as to form by the city attorney.
- 10. Be signed by all owners of the properties sharing the common boundary lines.
- 11. Be signed by all lienholders, other than taxing entities, that have either an interest in the properties sharing the common boundary lines or an improvement on those properties.
- 12. Be filed and made a part of the deed records of the county or counties in which the properties are located.

- **4201.3 Filing requirements.** A unity agreement is not effective until a true and correct copy of the approved agreement is filed in the deed records in accordance with Section 4201.2(12), a file- marked copy of the agreement(s) for each property sharing the common boundary line is filed with the *building official*, and the fees are paid in accordance with this section.
 - **4201.3.1 Fees.** An application for a unity agreement and the amendment or termination of an existing unity agreement will not be processed until the fee(s) have been paid in accordance with Section 303 of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*.

SECTION 4202 AMENDMENT OR TERMINATION OF UNITY AGREEMENTS

- **4202.1 Requirements.** A unity agreement may only be amended or terminated by a written instrument that is executed in accordance with this section on a form provided by the city. The instrument shall meet all of the following requirements:
 - 1. Be signed by an owner of property sharing the common boundary lines or by a lienholder, other than a taxing entity, that has either an interest in a property sharing the common boundary lines or an improvement on such a property.
 - 2. Be approved by the building official.
 - 3. Be approved as to form by the city attorney.
 - 4. Be filed and made a part of the deed records of the county or counties in which the properties are located.
- **4202.2 Approval by building official.** The *building official* shall approve an instrument amending or terminating an agreement if all properties governed by the agreement fully comply with this code. The amending or terminating instrument is not effective until it is filed in the deed records in accordance with Section 4201.3 and a file-marked copy of the agreement(s) for each of the properties is filed with the *building official*."
 - 175. The 2021 International Building Code is amended by adding a new Chapter 43,

"Green Building Program," to read as follows:

"CHAPTER 43 GREEN BUILDING PROGRAM

SECTION 4301 PURPOSE

4301.1 Purpose. The purpose of this chapter is to establish green building standards to help reduce the use of natural resources, create a healthier and more sustainable living environment and minimize the negative environmental impacts of development in Dallas and the North Texas region.

SECTION 4302 DEFINITIONS

4302.1 Definitions. The following terms used in this chapter shall have the meanings indicated in this section:

GREEN BUILDING. Structures and their surrounding landscapes designed, constructed and maintained to decrease energy and water usage and costs, to improve the efficiency and longevity of building systems and to decrease the burdens imposed on the environment and public health.

GREEN BUILT TEXAS. An initiative of the Homebuilders Association of Greater Dallas that provides climate-specific guidelines and verification systems for residential and multifamily *green buildings*.

GREEN BUILT TEXAS-CERTIFIABLE. A proposed project that is not required to be registered with the Home Builders Association of Greater Dallas, but is planned, designed and constructed to meet or exceed a certified rating using the most recent version of the *Green Built Texas* rating system.

LEED. The Leadership in Energy and Environmental Design *green building* rating systems are nationally accepted standards for *green buildings* developed by the *USGBC*.

LEED-CERTIFIABLE. A proposed project that is not required to be registered with the *USGBC*, but is planned, designed and constructed to meet or exceed a certified rating using the most recent version of LEED NC (new construction), LEED CS (core and shell), LEED CI (commercial interiors), LEED for schools, LEED for healthcare, LEED for retail or LEED for homes.

PROPOSED PROJECT. The erection of any new structure for which a person, firm or corporation is required to obtain a building permit.

USGBC. The U.S. Green Building Council, a nonprofit organization comprised of leaders from the building industry formed to encourage sustainability by promoting buildings that are environmentally responsible, profitable and healthy places to live and work.

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SECTION 4303 REQUIREMENTS

4303.1 General. This section applies to all *proposed projects*.

4303.2 All new construction. All *proposed projects* must:

- 1. meet the minimum requirements of the Dallas Green Construction Code;
- 2. be *LEED-certifiable*;
- 3. be Green Built Texas-certifiable; or
- 4. be certifiable under an equivalent green building standard.
- **4303.2.1 Formal certification not required.** Formal certification by the *USGBC*, *Green Built Texas* or an equivalent entity is not required.

4303.2.2 LEED projects.

- 1. Each *proposed project* may apply for compliance under any of the following *LEED* rating system products: LEED NC (new construction), LEED for schools, LEED for retail, LEED for healthcare, LEED CS (core and shell) or LEED for homes.
- 2. *Proposed projects* must achieve1 point under the water efficiency credit titled "Water Use Reduction (20% Reduction).
- **4303.2.3 Multifamily developments.** Multifamily developments have the option of using LEED NC, LEED for homes, *Green Built Texas, ICC 700* or an equivalent *green building* standard.
- **4303.3 Water use.** *Proposed projects* must reduce water usage by 20 percent. This may be accomplished by:
 - 1. using the water efficiency requirements of *Green Built Texas*, LEED NC, LEED CS, LEED CI, LEED for schools, LEED for healthcare or LEED for retail; or
 - 2. using 20 percent less water than the water use baseline calculated for the building's total interior water fixture use as required by the *Dallas Plumbing Code*."
- 176. Appendices A, B, C, D, E, F, G, H, I, J, K, L, M, N, O of the 2021 International Building Code are not adopted.

- 177. All chapters of the 2021 International Building Code adopted by this ordinance are subchapters of Chapter 53 of the Dallas City Code, as amended.
- 178. All references in the 2021 International Building Code to the fire code, plumbing code, mechanical code, electrical code, residential code, existing building code, energy conservation code, fuel gas code, green construction code, and swimming pool and spa code refer, respectively, to Chapters 16, 54, 55, 56, 57, 58, 59, 60, 61, and 62 of the Dallas City Code.

SECTION 2. Any errata corrections of the 2021 International Building Code published by the International Code Council are considered as part of this code.

SECTION 3. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 4. That Chapter 53 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. Any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

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SECTION 5. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 6. That this ordinance will take effect on May 12, 2023, and it is accordingly so ordained.

APPROVED AS TO FORM:

TAMMY L. PALOMINO, Interim City Attorney

Assistant City Attorney

Passed______APR 1 2 2023



PROOF OF PUBLICATION – LEGAL ADVERTISING

The legal advertisement required for the noted ordinance was published in the Dallas Morning News, the official newspaper of the city, as required by law, and the Dallas City Charter, Chapter XVIII, Section 7.

DATE ADOPTED BY CITY CO	OUNCIL APR 1 2 2023	
ORDINANCE NUMBER	32421	
DATE PUBLISHED	APD 1 5 2023	

ATTESTED BY:

E P