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9-24-13

ORDINANCE NO. 29161

An ordinance amending Chapter 53, "Dallas Building Code," of the Dallas City Code, as amended; adopting with certain changes the 2012 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 2012 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. Page xxi, "Legislation," is deleted.

2. Chapter 1, "Scope and Administration," of the 2012 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 Scope. The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

1. Detached one- and two-family *dwellings* and *townhomes* not more than three *stories* above *grade plane* in height with a separate *means of egress* and their accessory structures shall comply with the *Dallas One- and Two-Family Dwelling Code.*

2. Existing buildings undergoing *repair*, *alterations*, or additions and change of occupancy shall be permitted to comply with the *Dallas Existing Building Code.*

101.2.1 Detached one- and two-family dwellings more than three stories. Detached one- and two-family *dwellings* more than three *stories* above *grade plane* in height with a separate *means of egress* and their accessory structures must comply with this code.

101.2.2 Townhousing. *Townhousing* must comply with this code as an R-2 occupancy.

Exceptions:

1. A group R-3 occupancy may be used for buildings that also qualify as a *dwelling* if the unit(s) are entirely surrounded by public ways and *yards* or property lines.

2. A *dwelling* as part of a mixed occupancy must comply with the provisions of an R-3 occupancy and Section 508.

3. A *multiple dwelling* located on a *commercial dwelling site* may be classified as an R-3 occupancy where fire walls are provided between every two units.

101.3 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.

101.4 Referenced codes and standards. The codes and standards referenced in this code are considered part of the requirements of this code to the prescribed extent of each such reference only when such codes and standards have been specifically adopted by the city of Dallas. Whenever amendments have been adopted to the referenced codes and standards, each reference to the codes and standards is considered to reference the amendments as well. Any reference made to NFPA 70 or the *ICC Electrical Code* means the *Dallas Electrical Code*, as amended. References made to the *International Building Code, International Mechanical Code*, the *International Plumbing Code*, the *International Fire Code*, the *International Energy Conservation Code*, the *International Fuel Gas Code*, the *International Existing Building Code*, the *International Residential Code* and the *International Green Construction Code* respectively mean the *Dallas Building Code*, the *Dallas Mechanical Code*, the *Dallas Plumbing Code*, the

Dallas Fire Code, the *Dallas Energy Conservation Code*, the *Dallas Fuel Gas Code*, the *Dallas Existing Building Code*, the *Dallas One- and Two-Family Dwelling Code* and the *Dallas Green Construction Code*, as amended. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code apply.

101.4.1 Similar provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code or the International Codes listed in Section 101.4, as applicable, the provisions of this code or the International Codes listed in Section 101.4 take precedence over the provisions in the referenced code or standard."

3. Section 202, "Definitions," of Chapter 2, "Definitions," of the 2012 International Building Code is amended by alphabetically adding or amending the following definitions to read as follows:

"**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 individuals who are rendered *incapable of self-preservation* by the services provided. This group may include, but is not limited to, the following:

Colonic centers
Dialysis centers
Psychiatric centers
Sedation dentistry
Surgery centers"

"**APARTMENT HOUSE.** Any *multiple dwelling unit* or portion thereof not defined as a *townhouse* or *townhousing*."

"**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."

"**ATRIUM.** An opening connecting three [~~two~~] or more *stories* other than enclosed *stairways*, elevators, hoistways, escalators, plumbing, electrical, air-conditioning or other equipment, which is closed at the top and not defined as a mall. *Stories*, as used in this definition, do not include balconies within assembly groups or *mezzanines* that comply with Section 505."

"**BUILDING CODE.** Chapter 53, "*Dallas Building Code*," of the *Dallas City Code*, which is based upon the *International Building Code* as adopted by this jurisdiction."

"**CHANGE OF OCCUPANCY.** A change from one occupancy classification to another occupancy classification in a building or tenancy or portion thereof."

"**CODE OFFICIAL.** The *building official*."

"**COMMERCIAL DWELLING SITE.** Three or more *dwelling units* on a *lot*."

"**CONVENIENCE STAIRS.** Private circular *stairs*, other than a required *exit*, within a single tenant space and complying with Section 1009.11, Exception 2. Other *stairs* may also be considered convenience stairs if they are not required as *exits* and comply with all other applicable provisions of this code."

"**DEVELOPMENT CODE.** Chapters 51, 51A and 51P of the *Dallas City Code*."

"**ELECTRICAL CODE.** Chapter 56 of the *Dallas City Code* based upon the *National Electrical Code* as adopted by this jurisdiction."

"**ELEVATOR CODE.** The safety code for elevators, dumbwaiters, escalators and moving walks as adopted by this jurisdiction. See Chapter 30."

"**ENERGY CODE.** Chapter 59 of the *Dallas City Code* based upon the *International Energy Conservation Code* as adopted by this jurisdiction."

"**EXISTING BUILDING CODE.** Chapter 58 of the *Dallas City Code* based upon the *International Existing Building Code* as adopted by this jurisdiction."

"**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, BUILDING.** The aggregate floor area of all stories enclosed and bounded by fire *walls* or exterior *walls* of a building. 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.

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."

"**FIRE CODE.** Chapter 16 of the *Dallas City Code* based upon the *International Fire Code* as adopted by this jurisdiction."

"**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."

"**FUEL GAS CODE.** Chapter 60 of the *Dallas City Code* based upon the *International Fuel Gas Code* as adopted by this jurisdiction."

"**GREEN CONSTRUCTION CODE.** Chapter 61 of the *Dallas City Code* as adopted by this jurisdiction."

"**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."

"**HISTORIC BUILDINGS.** Buildings that are [~~listed in or eligible for listing in the National Register of Historic Places, or~~] designated as historic in accordance with the *Dallas Existing Building Code* [~~under appropriate state or local law (see Sections 3409 and 3411.9)~~]."

"**MECHANICAL CODE.** Chapter 55 of the *Dallas City Code* based upon the *International Mechanical Code* as adopted by this jurisdiction."

"**MULTIPLE DWELLING.** Any structure or portion thereof that contains more than one dwelling unit."

"**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."

"**OPEN STRUCTURE.** A structure that supports equipment and operations not enclosed within building *walls*. Roofs or canopies without enclosing *walls* are not considered an enclosure."

"**POOL.** Any man made permanently installed or non-portable structure, basin, chamber or tank containing an artificial body of water that is used for swimming, diving, aquatic sports or other aquatic activity other than a *residential pool* and that is operated by an owner, lessee, operator, licensee or concessionaire, regardless of whether a fee is charged for use. The pool may be either publicly or privately owned. The term does not include a spa or a decorative fountain that is not used as a pool or pools with depths of 18 inches or less. References within the standard to various types of pools are defined by the following categories:

1. Class A pool—Any pool used with or without a fee, for accredited competitive aquatic events such as Federation Internationale De Natation Amateur (FINA), United States Swimming, United States Diving, National Collegiate Athletic Association (NCAA) or National Federation of State High School Associations (NFSHSA) events. A class A pool may also be used for recreation.

2. Class B pool—Any pool used for public recreation and open to the general public with or without a fee.

3. Class C pool—Any pool operated for and in conjunction with:

   1.1. Lodging such as hotels, motels, apartments, condominiums or mobile home parks;

   1.2. Property owners' associations, private organizations or clubs; or

   1.3. A school, college or university while being operated for academic or continuing education classes.

   The use of such a pool would be open to occupants, members or students and their guests, but not open to the general public.

2. Class D pool—A wading pool with a maximum water depth of 24 inches at any point.

POOL YARD OR SPA YARD. An area that has a *pool or spa yard enclosure* and that contains a *pool* or *spa*.

POOL OR SPA YARD ENCLOSURE. A fence, wall or combination of fences, *walls*, gates, windows or doors that completely surround a *pool* or *spa*.

POOLS, STATE LAW. Refers to 25 *Texas Administrative Code*, Chapter 265, Subchapter L, "Standards for Swimming Pools and Spas," which went into effect on September 1, 2004 (except Section 265.190, "Suction Outlets and Return Inlets at Post-10/01/99 and Pre-10/01/99 Pools and Spas," which had an effective date of January 1, 2005."

"**PLUMBING CODE.** Chapter 54 of the *Dallas City Code* based upon the *International Plumbing Code* as adopted by this jurisdiction."

"**RESIDENTIAL CODE.** Chapter 57 of the *Dallas City Code* based upon the *International Residential Code* as adopted by this jurisdiction.

RESIDENTIAL POOL OR SPA. A *pool* or *spa* that is located on private property under the control of the property owner or the owner's tenant and that is intended for use by not more than two resident families or their guests. It includes a *pool* or *spa* serving only a single-family home or a duplex."

"**SPA.** A constructed permanent or portable structure that is 2 feet or more in depth and that has a surface area of 250 square feet or less or a volume of 3,250 gallons or less and that is intended to be used for bathing or other recreational uses and is not drained and refilled after each use. It may include, but is not limited to, hydrojet circulation, hot water, cold water, mineral baths, air induction bubbles or any combination thereof. A spa as referred to in this code is not a business establishment such as a day spa or health spa. Industry terminology for a spa includes, but is not limited to, "hydrotherapy pool," "whirlpool," "hot spa," hot tub," etc. A spa does not include a residential spa."

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

"**TOWER STRUCTURE.** A structure other than a *building* that has a height normally greater than its largest horizontal dimension. Examples of tower structures include antenna supports, chimneys, tank supports, sign supports, equipment supports and other structures as determined by the *building official*."

"**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 has a yard or public way on at last two sides.

[A] TOWNHOUSE. A *multiple* [~~single family~~] *dwelling unit* located on a *commercial dwelling site* and constructed with [~~in~~] a maximum [~~group~~] of two [~~three or more attached~~] units located between *exterior walls* and/or fire walls complying with Section 706 with [~~in which~~] each unit extending [~~extends~~] from its [~~the~~] foundation to its roof and has a *yard* or *public way* [~~with open space~~] on at least two sides.

TOWNHOUSING. A *multiple dwelling unit* located on a *commercial dwelling site* and constructed with more than two units between *exterior walls* or fire walls complying with Section 706 with each unit extending from its foundation to its roof and that has a *yard* or *public way* on at least two sides."

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

"**WEATHERED MEMBRANE MATERIAL.** Membrane material that has been subjected to NFPA 701 Test Method 2 or its equivalent and includes the accelerated weathering and leaching procedures."

"**WORK OF ART.** Paintings, mural decorations, stained glass, statutes, bas-reliefs or other sculptures, monuments, fountains, arches or other structures of a permanent or temporary character intended for ornament or commemoration."

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, "Use and Occupancy Classification," of the 2012 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 except when applying the assembly requirements of Chapters 10 and 11."

5. Subsection 304.1, "Business Group B," of Section 304, "Business Group B," of Chapter 3, "Use and Occupancy Classification," of the 2012 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
Electronic data processing
Fire stations
Laboratories: testing and research
Motor vehicle showrooms
Police stations with detention facilities for 5 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 within a school or academic program"

6. Subsection [F] 307.1, "High-Hazard Group H," of Section 307, "High-Hazard Group H," of Chapter 3, "Use and Occupancy Classification," of the 2012 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 for 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*.

Exceptions: The following shall not be classified as Group H, but shall be classified as the occupancy that they most nearly resemble.

1. Buildings and structure occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 of the *Dallas* [~~*International*~~] *Fire Code*.

2. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the *Dallas* [~~*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. See also Chapter 12 of the *Dallas Fire Code.*

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.

9. Stationary batteries utilized for facility emergency power, uninterruptable power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and *ventilation* is provided in accordance with the Dallas [~~International~~] *Mechanical Code.*

10. Corrosives shall not include personal or household products in their original packaging used in retail display or commonly used building materials.

11. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of the Dallas [~~International~~] *Fire Code.*

12. 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.

13. 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.*

[F] 307.1.1 Hazardous materials. Hazardous materials in any quantity shall conform to the requirements of this code, including Section 414, and the Dallas [~~International~~] *Fire Code.*"

7. Paragraph 308.3.1, "Five or Fewer Persons Receiving Care," of Subsection 308.3, "Institutional Group I-1," of Section 308, "Institutional Group I," of Chapter 3, "Use and Occupancy Classification," of the 2012 International Building Code is amended to read as follows:

"**308.3.1 Five or fewer persons receiving care.** A facility such as the above with five or fewer persons receiving care shall be classified as Group R-3 or shall comply with the Dallas One- and Two-Family Dwelling [~~International Residential~~] *Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the Dallas One- and Two-Family Dwelling [~~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 Use and Occupancy," of the 2012 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 protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, which shall comply with [~~the~~] 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, but used 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. Paragraph [F] 402.7.3, "Standby Power," of Subsection [F] 402.7, "Emergency Systems," of Section 402, "Covered Mall and Open Mall Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is deleted.

10. Paragraph [F] 402.7.4, "Emergency Voice/Alarm Communication System," of Subsection [F] 402.7, "Emergency Systems," of Section 402, "Covered Mall and Open Mall Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**[F] 402.7.4 Emergency voice/alarm communication system.** [~~Where the total floor area is greater than 50,000 square feet (4645 m^2) within either a *covered mall building* or within the perimeter line of an *open mall building*, an *emergency voice/alarm communication system* shall be provided.~~]

When an e[~~E~~]*mergency voice/alarm communication system*[*s*] is provided serving a *mall*, it [~~required or otherwise,~~] shall be accessible to the fire department. The systems shall be provided in accordance with Section 907.5.2.2."

11. Subsection 403.1, "Applicability," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**403.1 Applicability.** *High-rise buildings* shall comply with Sections 403.2 through 403.6.

Exception: 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 412.3.

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 portions of b[~~B~~]uildings with 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 with a Group H-1, H-2 or H-3 occupancy in accordance with Section 415."

12. Subsection [F] 403.3, "Automatic Sprinkler System," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 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 903.3.5.2.

Exception: An *automatic sprinkler system* shall not be required in spaces or areas of[~~:~~

~~1.~~] o[~~O~~]*pen parking garages* in accordance with Section 406.5.

[~~2. 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 (128,000 mm) in *building height* shall be supplied by no 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 1015.2.

[F] 403.3.2 Water supply to required fire pumps. 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 no fewer than one of the connections.

[F] 403.3.3 Fire pump room. Fire pumps shall be located in rooms protected in accordance with Section 913.2.1."

13. 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 Use and Occupancy," of the 2012 International Building Code is deleted.

14. 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 Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**403.5.4 Smokeproof enclosures.** Every required *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 1022.10. In any building that includes a *scissor stair* as described in Exception 1 of Section 1015.2.1, both exit stairs of the dual enclosure structure must be a smokeproof enclosure or pressurized stairway in accordance with Section 909.20.

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 *scissor stairs* are used as two exits in accordance with Section 1015.2.1. 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."

15. Subsection [F] 404.3, "Automatic Sprinkler Protection," of Section 404, "Atriums," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 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."

16. Subsection 404.5, "Smoke Control," of Section 404, "Atriums," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**404.5 Smoke control.** A smoke control system shall be installed in accordance with Section 909.

~~**[Exception:** Smoke control is not required for *atriums* that connect only two *stories*.~~]"

17. Subsection 404.6, "Enclosure of Atriums," of Section 404, "Atriums," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 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.

Exception: 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. 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;

    1.1. 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

    1.2. 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 any three floors of the *atrium* provided 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 filling system is required to the extent that the smoke layer interface drops below 6 feet in height as required in Section 909.8.1."

18. Paragraph 405.7.2, "Smokeproof Enclosure," of Subsection 404.7, "Means of Egress," of Section 405, "Underground Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**405.7.2 Smokeproof enclosure.** Every required *stairway* serving any floor levels more than 30 feet (9144 mm) below the finished floor of its *level of exit discharge* shall comply with the requirements for a *smokeproof enclosure* as provided in Section 1022.10."

19. Paragraph 406.3.2, "Area Increase," of Subsection 406.3, "Private Garages and Carports," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**406.3.2 Area increase.** Group U occupancies used for the storage of private or pleasure-type motor vehicles where no repair work is completed or fluid is dispensed are permitted to be 3,000 square feet (279 m^2) where the following provisions are met:

1. For a mixed occupancy building, the *exterior wall* and opening protection for the Group U portion of the building shall be as required for the major occupancy of the building. For such a mixed occupancy building, the allowable floor area of the building shall be as permitted for the major occupancy contained therein.

2. For a building containing only a Group U occupancy, the *exterior wall* shall not be required to have a *fire-resistance rating* and the area of openings shall not be limited where the *fire separation distance* is 5 feet (1524 mm) or more.

More than one 3,000-square-foot (279 m^2) Group U occupancy shall be permitted to be in the same structure, provided each 3,000-square-foot (279 m^2) area is separated by *fire walls* complying with Section 706.

Exceptions:

1. In a fully sprinklered building, if each garage is sprinklered and the installation is in accordance with Section 903.1.1 or 903.1.2, the floor area of each garage may be treated as permitted for the major occupancy therein if each garage is accessible only from within and directly connected to a single dwelling unit.

2. In a single building, garages that are accessible by people from more than one dwelling unit shall be considered part of the building and have its allowable floor area treated as permitted for the major occupancy therein if all of the following conditions are met:

   2.1. The aggregate area of the garages does not exceed 25 percent of the aggregate area of the main use.

   2.2. Each individual private garage has a maximum floor area of 500 square feet.

   2.3. Each garage is separated from every other garage and all other portions of the building by 1-hour fire resistive construction.

   2.4. Sprinklers must be installed in each garage. The sprinkler installation shall be in accordance with Section 903.1.1 or 903.1.2."

20. Paragraph 406.3.4, "Separation," of Subsection 406.3, "Private Garages and Carports," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**406.3.4 Separation.** Separations shall comply with the following:

1. The private garage shall be separated from the *dwelling unit* and its *attic* area by means of gypsum board, not less than ½ inch (12.7 mm) in thickness, applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8-inch (15.9 mm) Type X gypsum board or equivalent and ½-inch (12.7 mm) gypsum board applied to structures supporting the separation from habitable rooms above the garage. Door openings between a private garage and the *dwelling unit* shall be equipped with either solid wood doors or honeycomb core steel doors not less than 1 3/8 inches (34.9 mm) in thickness, or doors in compliance with Section 716.5.3 with a fire protection rating of not less than 20 minutes. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Doors shall be *self-closing* and self-latching.

2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the *dwelling unit*, including its *attic* area, from the garage shall be constructed of sheet steel of not less than 0.019 inches (0.48 mm), in thickness, and shall have no openings into the garage.

3. A separation is not required between a Group R-3 and U carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above.

4. A separation is not required between Group R-2 and U occupancies provided that the carport is non-combustible and entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm)."

21. Table 406.5.4, "Open Parking Garages Area and Height," of Paragraph 406.5.4, "Area and Height," of Subsection 406.5, "Open Parking Garages," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is deleted and replaced with a new Table 406.5.4, "Open Parking Garages Area and Height," to read as follows:

"TABLE 406.5.4
OPEN PARKING GARAGES AREA AND HEIGHT

TYPE OF CONSTRUCTION	AREA PER TIER (square feet)	HEIGHT (in tiers)
IA	Unlimited	Unlimited
IB	Unlimited	Unlimited
IIA	Unlimited	Unlimited
IIB	50,000[a]	8 tiers
IV	50,000	4 tiers

For SI: 1 square foot = 0.0929 m^2.
[a] See additional provisions in Section 406.5.5."

22. 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 Use and Occupancy," of the 2012 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. No 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 and no part 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* accessible 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.

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."

23. Subsection 406.8, "Repair Garages," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**406.8 Repair garages.** Repair garages shall be constructed in accordance with the *Dallas* [~~*International*~~] *Fire Code* and Sections 406.8.1 through 406.8.6. This occupancy shall 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. This occupancy shall not include motor fuel-dispensing facilities, as regulated in Section 406.7.

406.8.1 Mixed uses. Mixed uses shall be allowed in the same building as a repair garage subject to the provisions of Section 508.1.

406.8.2 Ventilation. Repair garages shall be mechanically ventilated in accordance with the *Dallas* [~~*International*~~] *Mechanical Code*. The *ventilation* system shall be controlled at the entrance to the garage.

406.8.3 Floor surface. Repair garage floors shall be of concrete or similar noncombustible and nonabsorbent materials.

Exception: Slip-resistant, nonabsorbent, *interior floor finishes* having a critical radiant flux not more than 0.45 W/cm^2, as determined by NFPA 253, shall be permitted.

406.8.4 Heating equipment. Heating equipment shall be installed in accordance with the *Dallas* [~~*International*~~] *Mechanical Code*.

[F] 406.8.5 Gas detection system. Repair garages used for the repair of vehicles fueled by nonodorized gases such as hydrogen and nonodorized LNG, shall be provided with a flammable gas detection system.

[F] 406.8.5.1 System design. The flammable gas detection system shall be *listed* or *approved* and shall be calibrated to the types of fuels or gases used by vehicles to be repaired. The gas detection system shall be designed to activate when the level of flammable gas exceeds 25 percent of the lower flammable limit (LFL). Gas detection shall be provided in lubrication or chassis service pits of repair garages used for repairing non-odorized LNG-fueled vehicles.

[F] 406.8.5.1.1 Gas detection system components. Gas detection system control units shall be *listed* and *labeled* in accordance with UL 864 or UL 2017. Gas detectors shall be *listed* and *labeled* in accordance with UL 2075 for use with the gases and vapors being detected.

[F] 406.8.5.2 Operation. Activation of the gas detection system shall result in all of the following:

1. Initiation of distinct audible and visual alarm signals in the repair garage.

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] 406.8.5.3 Failure of the gas detection system. Failure of the gas detection system shall result in the deactivation of the heating system, activation of the mechanical *ventilation* system where the system is inter-locked with the gas detection system and cause a trouble signal to sound in an *approved* location.

[F] 406.8.6 Automatic sprinkler system. A repair garage shall be equipped with an *automatic sprinkler system* in accordance with Section 903.2.9.1."

24. Subsection [F] 411.4, "Automatic Sprinkler System," of Section 411, "Special Amusement Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended to read as follows:

"**[F] 411.4 Automatic sprinkler system.** *Special amusement buildings* shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. Where the *special amusement building* 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 building* is less than 7,500 [~~1,000~~] square feet (690 [~~93~~] m^2), [~~and~~] the travel distance from any point 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."

25. Subsection 420.2, "Separation Walls," of Section 420, "Groups I-1, R-1, R-2, R-3," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 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."

26. Subsection 420.3, "Horizontal Separation," of Section 420, "Groups I-1, R-1, R-2, R-3," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 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* from portions of the same occupancy contiguous to them, but not part of the same *dwelling* or *sleeping units*, shall be constructed as horizontal assemblies in accordance with Section 711."

27. Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2012 International Building Code is amended by adding a new Section 425, "Aircraft Noise Attenuation Requirements," to read as follows:

"SECTION 425
AIRCRAFT NOISE ATTENUATION REQUIREMENTS

425.1 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.

425.2 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.

425.3 Noise insulation.

425.3.1 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 425.3.2. 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 425.3.2.

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*.

425.3.2 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."

28. Paragraph 506.2.2, "Open Space Limits," of Subsection 506.2, "Frontage Increase," of Section 506, "Building Area Modifications," of Chapter 5, "General Building Heights and Areas," of the 2012 International Building Code is amended to read as follows:

"**506.2.2 Open space limits.** 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 *approved fire lane*, a minimum 10-foot-wide pathway meeting the requirements for fire department access from the street or an *approved fire lane* must be provided."

29. Subsection 507.3, "Sprinklered, One Story," of Section 507, "Unlimited Area Buildings," of Chapter 5, "General Building Heights and Areas," of the 2012 International Building Code is amended to read as follows:

"**507.3 Sprinklered, one story.** The area of a Group B, F, M or S building no more than one *story above grade plane* of any construction type, or the area of a Group A-4 building no more than one story above grade plane of other than Type V construction, 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 507.3 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 by athletes during their competitive event for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in Group A-4, provided that:

   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.

507.3.1 Mixed occupancy buildings with Groups A-1 and A-2. Group A-1 and A-2 occupancies of other than Type V construction shall be permitted within mixed occupancy buildings of unlimited area complying with Section 507.3, provided:

1. Group A-1 and A-2 occupancies are separated from other occupancies as required for separated occupancies in Section 508.4.4 with no reduction allowed in the *fire-resistance rating* of the separation based upon the installation of an *automatic sprinkler system*;

2. Each area of the portions of the building used for Group A-1 or A-2 occupancies shall not exceed the maximum allowable area permitted for such occupancies in Section 503.1; and

3. *Exit* doors from Group A-1 and A-2 occupancies shall discharge directly to the exterior of the building."

30. Section 507, "Unlimited Area Buildings," of Chapter 5, "General Building Heights and Areas," of the 2012 International Building Code is amended by adding a new Subsection 507.13, "Unlimited Area Based on Types of Construction," to read as follows:

"**507.13 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, Division 1, 2 or 3 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 mall buildings or motion picture theaters.

Exception: Unlimited area buildings may house Group H, Division 2 and 3 as specified in Section 507.8."

31. Paragraph 508.2.1, "Area Limitations," of Subsection 508.2, "Accessory Occupancies," of Section 508, "Mixed Use and Occupancy," of Chapter 5, "General Building Heights and Areas," of the 2012 International Building Code is amended to read as follows:

"**508.2.1 Area limitations.** Aggregate accessory occupancies shall not occupy more than 10 percent of the *building area* of the *story* in which they are located and shall not exceed the tabular values in Table 503, without *building area* increases in accordance with Section 506 for such accessory occupancies.

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 503 without *building area* increases in accordance with Section 506 for such accessory occupancies."

32. Subsection 510.2, "Horizontal Building Separation Allowance," of Section 510, "Special Provisions," of Chapter 5, "General Building Heights and Areas," of the 2012 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 applicable conditions are met:

1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than 3 hours. The *horizontal assembly* may be of a minimum 2-hour *fire-resistance rating* in a structure protected throughout the building above and below the *horizontal assembly* with an *approved automatic sprinkler system* throughout in accordance with Section 903.3.1.1.

2. The building below the *horizontal assembly* is not greater than one *story above grade plane*.

3. The building below the *horizontal assembly* is of Type IA construction.

4. *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 716.5.

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 716.5. the enclosure walls extending above the *horizontal assembly* shall be permitted to have a 1-hour *fire-resistance rating*, provided:

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.

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 of the following occupancies:

   6.1. Group S-2 parking garage used for the parking and storage of private motor vehicles;

   6.2. Multiple Group A, each with an *occupant load* of less than 300;

   6.3. Group B;

   6.4. Group M;

   6.5. Group R; and

   6.6. Uses incidental to the operation of the building (including entry lobbies, mechanical rooms, storage areas and similar uses).

7. The maximum *building height* in feet (mm) shall not exceed the limits set for in Section 503 for the building having the smaller allowable height as measured from the *grade plane*."

33. Chapter 5, "General Building Heights and Areas," of the 2012 International Building 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 and 511.1.2.

511.1.1 Occupancy fire areas. Occupancy fire areas must be limited in accordance with Sections 903.2.1 through 903.2.10.1.

511.1.2 Building fire areas. Building fire areas must be limited in accordance with Section 903.2.13."

34. Table 601, "Fire-Resistance Rating Requirements for Building Elements (Hours)," of Section 601, "General," of Chapter 6, "Types of Construction," of the 2012 International Building Code is amended to read as follows:

"TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS
FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT	TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
	A	B	A[d]	B	A[d]	B	HT	A[d]	B
Primary structural frame[g] (see Section 202)	3[a]	2[a]	1	0	1	0	HT	1	0
Bearing walls Exterior[f, g, h] Interior	3 3[a]	2 2[a]	1 1	0 0	2 1	2 0	2 1/HT	1 1	0 0
Nonbearing walls and partitions Exterior	See Table 602								
Nonbearing walls and partitions Interior[e]	0	0	0	0	0	0	See Section 602.4.6	0	0
Floor construction and associated secondary members (see Section 202)	2	2	1	0	1	0	HT	1	0
Roof construction and associated secondary members[i] (See Section 202)	1 ½[b]	1[b,c]	1[b,c]	0[c]	1[b,c]	0	HT	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 shall be allowed where a 1-hour or less fire-resistance rating is required.

d. An approved automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed to be substituted for 1-hour fire-resistance-rated construction where required throughout, provided such system is not [~~otherwise required by other provisions of the code or~~] used for an allowable area increase in accordance with Section 506.3, not used for unlimited area in accordance with Section 507 or used for an allowable height increase in accordance with Section 504.2. The 1-hour substitution for the fire resistance of exterior walls shall not be permitted. The provision of an approved automatic sprinkler system shall not wave or reduce the required fire-resistive constriction for:
   1. *Dwelling unit* separations (Section 708).
   2. Shaft enclosures (Section 713).
   3. Stair enclosures (Section 1022).
   4. Exit passageways (Section 1023).
   5. Structural member supporting shaft enclosures or exit passageways.
   6. Buildings reduced to 1-hour fire-resistive throughout by other provisions of this code.

e. Not less than the fire-resistance rating required by other sections of this code.

f. Not less than the fire-resistance rating based on fire separation distance (See Table 602).

g. Not less than the fire-resistance rating as referenced in Section 704.10.

h. In buildings provided throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, Table 601 3-hour exterior wall protection may be reduced to 2-hour protection; Table 601 2-hour required exterior wall protection may be reduced to 1-hour protection. Table 601 1-hour required exterior wall protection shall not be reduced.

i. 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 25."

35. Table 602, "Fire-Resistance Rating Requirements for Exterior Walls Based on Separation Distance," of Section 602, "Construction Classification," of Chapter 6, "Types of Construction," of the 2012 International Building Code is amended to read as follows:

"TABLE 602
FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE[a, e, h, j]

FIRE SEPARATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP H[f]	OCCUPANCY GROUP F-1, M, S-1[g]	OCCUPANCY GROUP A, B, E, F-2, I, R, S-2[g], U[b, j]
X < 5[c]	All	3	2	1
5 ≤ X <10	IA	3	2	1
	Others	2	1	1
10 ≤ X < 30	IA, IB	2	1	1[d]
	IIB, VB	1	0	0
	Others	1	1	1[d]
X ≥ 30	All	0	0	0

For SI: 1 foor = 304.8 mm.

a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
b. For special requirements for Group U occupancies, see Section 406.3. Group R-2 and Group U carports, as applicable in Section 406.3.4, Exception 4, must have a fire-resistance rating where fire separation distance is less than 10 feet.
c. See Section 706.1.1 for party walls.
d. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
e. 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.
f. For special requirements for Group H occupancies, see Section 415.5.
g. For special requirements for Group S aircraft hangars, see Section 412.4.1.
h. 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.
i. 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.
j. 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."

36. Subsection 603.1, "Allowable Materials," of Section 603, "Combustible Material in Type I and II Construction," of Chapter 6, "Types of Construction," of the 2012 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 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.

1.2. Nonbearing *exterior walls* where fire-resistance rated construction is not required.

1.3. Roof construction, including girders, trusses, framing and decking.

Exception: 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. 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 on 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 Sections 801 and 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 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 410.3 and 410.4, respectively.

13. Combustible *exterior wall coverings*, balconies and similar projections and bay or oriel windows or similar appendages in accordance with Chapter 14.

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 803.4.

19. Heavy timber as permitted by [~~Note c to~~] Table 601 and Sections 602.4.7 and 1406.3.

20. Aggregates, component materials and admixtures as permitted by Section 703.2.2.

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 1705.13 and 1705.14, 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 Dallas [~~*International*~~] *Mechanical Code.*

603.1.1 Ducts. The use of nonmetallic ducts shall be permitted where installed in accordance with the limitations of the Dallas [~~*International*~~] *Mechanical Code.*

603.1.2 Piping. The use of combustible piping materials shall be permitted where installed in accordance with the limitations of the Dallas [~~*International*~~] *Mechanical Code* and the Dallas [~~*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."

37. Subsection 703.4, "Automatic Sprinklers," of Section 703, "Fire-Resistance Ratings and Fire Tests," of Chapter 7, "Fire and Smoke Protection Features," of the 2012 International Building Code is amended to read as follows:

"**703.4 Automatic sprinklers.** Under the prescriptive fire-resistance requirements of the *Dallas* [~~*International*~~] *Building Code*, the fire-resistance rating of a building element, component or assembly shall be established without the use of *automatic sprinklers* or any other fire suppression system being incorporated as part of the assembly tested in accordance with the fire exposure, procedures, and acceptance criteria specified in ASTM E 119 or UL 263. However, this section shall not prohibit or limit the duties and powers of the *building official* allowed by Section[s] 106 [~~104.10 and 104.11~~]."

38. 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 2012 International Building Code is amended to read as follows:

"**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
	Unprotected, Sprinklered (UP, S)[i]	Not Permitted
	Protected (P)	Not Permitted
3 to less than 5[d,e]	Unprotected, Nonsprinklered (UP, NS)	Not Permitted
	Unprotected, Sprinklered (UP, S)[i]	15 %
	Protected (P)	15%
5 to less than 10[e, f, j]	Unprotected, Nonsprinklered (UP, NS)	10%[h]
	Unprotected, Sprinklered (UP, S)[i]	25%
	Protected (P)	25%
10 to less than 15[e, f, g]	Unprotected, Nonsprinklered (UP, NS)	15%[h]
	Unprotected, Sprinklered (UP, S)[i]	45%
	Protected (P)	45%
15 to less than 20[f, g]	Unprotected, Nonsprinklered (UP, NS)	25%
	Unprotected, Sprinklered (UP, S)[i]	75%
	Protected (P)	75%
20 to less than 25[f, g]	Unprotected, Nonsprinklered (UP, NS)	45%
	Unprotected, Sprinklered (UP, S)[i]	No Limit

25 to less than 30[f, g]	Protected (P)	No Limit
	Unprotected, Nonsprinklered (UP, NS)	70%
	Unprotected, Sprinklered (UP, S)[i]	No Limit
30 or greater	Protected (P)	No Limit
	Unprotected, Nonsprinklered (UP, NS)	No Limit
	Unprotected, Sprinklered (UP, S)[i]	Not Required
	Protected (P)	Not Required

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 limited.
h. Includes buildings accessory to Group R-3.
i. Not applicable to Group H-1, H-2 and H-3 occupancies.
j. For special requirements for Group U occupancies, see Section 406.3.2.
k. 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."

39. 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 2012 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	3[a]
F-1, H-3[b], 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 415.6 and 415.7.
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."

40. Paragraph 712.1.8, "Two-Story Openings," of Subsection 712.1, "General," of Section 712, "Vertical Openings," of Chapter 7, "Fire and Smoke Protection Features," of the 2012 International Building Code is amended to read as follows:

"**712.1.8 Two-story openings.** In other than Groups I-2 and I-3, a floor opening that is not used as one of the applications listed in this section shall be permitted if it complies with all of the items below.

1. Does not connect more than two stories.
2. Does not contain a stairway or ramp required by Chapter 10.
3. Does not penetrate a horizontal assembly that separates fire areas or smoke barriers that separate smoke compartments.
4. Is not concealed within the construction of a wall or a floor/ceiling assembly.
5. Is not open to a corridor in Group I and H [~~R~~] occupancies.
6. Is not open to a corridor on nonsprinklered floors.
7. Is separated from floor openings and air transfer openings serving other floors by construction conforming to required shaft enclosures."

41. Subsection 713.13, "Refuse and Laundry Chutes," of Section 713, "Shaft Enclosures," of Chapter 7, "Fire and Smoke Protection Features," of the 2012 International Building Code is amended to read as follows:

"**713.13 Refuse and laundry chutes.** In other than Group I-2, refuse and laundry chutes, access and termination rooms and incinerator rooms shall meet the requirements of Sections 713.13.1 through 713.13.6.

Exceptions:

1. Chutes serving and contained within a single dwelling unit.
2. Refuse and laundry chutes in Group I-2 shall comply with the provisions of NFPA 82, Chapter 5 including the requirements for venting.

713.13.1 Refuse, recycling and laundry chute enclosures. A shaft enclosure containing a refuse, recycling, or laundry chute shall not be used for any other purpose and shall be enclosed in accordance with Section 713.4. Openings into the shaft, including those from access rooms and termination rooms, shall be protected in accordance with this section and Section 716. Openings into chutes shall not be located in *corridors*. Doors shall be self- or automatic-closing upon the actuation of a smoke detector in accordance with Section 716.5.9.3, except that heat-activated closing devices shall be permitted between the shaft and the termination room.

713.13.2 Materials. A shaft enclosure containing a refuse, recycling, or laundry chute shall be constructed of materials as permitted by the building type of construction.

713.13.3 Refuse, recycling and laundry chute access rooms. Access openings for refuse, recycling and laundry 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 716.5.9.3.

713.13.4 Termination room. Refuse, recycling, and laundry chutes shall discharge into an enclosed room separated from the remainder of the building by *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. Openings into the termination room 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 716.5.9.3. Refuse chutes shall not terminate in an incinerator room. Refuse, recycling and laundry rooms that are not provided with chutes need only comply with Table 509.

713.13.5 Incinerator room. Incinerator rooms shall comply with Table 509.

713.13.6 Automatic sprinkler system. An *approved automatic sprinkler system* shall be installed in accordance with Section 903.2.11.2."

42. Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended by adding a new Subsection 901.9, "Systems Out Of Service," to read as follows:

"**901.9 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."

43. Subsection [F] 903.1, "General," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended by adding a new Subsection 903.1.2, "Separation," to read as follows:

"**903.1.2 Separation.** 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.

Exception: Open parking garages in accordance with Section 406.5"

44. Subsection [F] 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2012 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 Section 903.2.1 through 903.2.12. Automatic sprinklers must not be installed in elevator machine rooms, 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 those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainer 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. For Group A-1, A-2, A-3 and A-4 occupancies, the *automatic sprinkler system* shall be provided throughout the floor area where the Group A-1, A-2, A-3 or A-4 occupancy is located, and in all floors from the Group A occupancy to, and including, the nearest *level of exit discharge* serving the Group A occupancy. For Group A-5 occupancies, the *automatic sprinkler system* shall be provided in the spaces indicated in Section 903.2.1.5.

[F] 903.2.1.1 Group A-1. An *automatic sprinkler system* shall be provided for Group A-1 occupancies where one of the following conditions exists:

1. The *fire area* exceeds 12,000 square feet (1115 m^2);
2. The *fire area* has an *occupied load* of 300 or more;
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies; or
4. The *fire area* contains a multitheater complex.

[F] 903.2.1.2 Group A-2. An *automatic sprinkler system* shall be provided for Group A-2 occupancies where one of the following conditions exists:

1. The *fire area* exceeds 5,000 square feet (464.5 m^2);
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 for Group A-3 occupancies where one of the following conditions exists:

1. The *fire area* exceeds 12,000 square feet (1115 m^2);
2. The *fire area* has an *occupant load* of 300 or more; or
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

[F] 903.2.1.4 Group A-4. An *automatic sprinkler system* shall be provided for Group A-4 occupancies where one of the following conditions exists:

1. The *fire area* exceeds 12,000 square feet (1115 m^2);
2. The *fire area* has an *occupant load* of 300 or more; or
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

[F] 903.2.1.5 Group A-5. An *automatic sprinkler system* shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory use areas in excess of 1,000 square feet (93 m^2).

[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, whether rendered incapable by staff or staff has accepted responsibility for care recipients already incapable.

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 where such care is provided as well as all floors below, and all floors between the level of ambulatory care and the nearest *level of exit discharge*, including the *level of exit discharge*.

[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 m^2) in area.

2. Throughout every portion of educational buildings below the lowest *level of exit discharge* serving that portion of the building.

   Exception: An *automatic sprinkler system* is not required in any area below the lowest *level of exit discharge* serving that area where every classroom throughout the building has at least one exterior *exit* door at ground level.

[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 m^2).

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 m^2).

4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m^2).

[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 m^2) in area which generate finely divided combustible waste or use finely divided combustible materials.

[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. 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*.

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 facilities.

2. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be allowed in Group I-1 facilities when in compliance with all of the following:

   2.1. A hydraulic design information sign is located on the system riser;

   2.2. Exception 1 of Section 903.4 is not applied; and

   2.3. Systems shall be maintained in accordance with the requirements of Section 903.3.1.2.

3. An *automatic sprinkler system* is not required where day care facilities are at the *level of exit discharge* and where every room where care is provided has at least one exterior exit door.

4. 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 and all floors between the level of care and the level of *exit discharge*, 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 m^2).
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 m^2).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m^2).

[F] 903.2.7.1 High-piled storage. An *automatic sprinkler system* shall be provided in accordance with the Dallas [~~International~~] *Fire Code* in all buildings of Group M where storage of merchandise is in high-piled or rack storage arrays.

[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* or *townhouse* which complies with Section 903.2.13.

[F] 903.2.8.1 Group R-3 or R-4 congregate residences. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 or R-4 congregate residences with 16 or fewer residents.

[F] 903.2.8.2 Care facilities. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in care facilities with 5 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 m^2).
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 m^2).
4. A Group S-1 *fire area* used for the storage of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (464 m^2).

5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m^2). 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.

[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 m^2).

2. Buildings no more than one *story above grade plane*, with a *fire area* containing a repair garage exceeding 12,000 square feet (1115 m^2).

3. Buildings with repair garages servicing vehicles parked in basements.

4. A Group S-1 *fire area* used for the repair of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (464 m^2).

[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 m^3) shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

[F] 903.2.9.3 Self-service storage facility. An *automatic sprinkler system* must be installed throughout all self-service storage facilities.

Exception: One-story self-service storage facilities that have no interior corridors, with a one-hour fire barrier separation wall installed between every storage compartment.

[F] 903.2.10 Group S-2 enclosed parking garages. An *automatic sprinkler system* shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 as follows:

1. Where the *fire area* of the enclosed parking garage exceeds 12,000 square feet (1115 m^2); or

2. Where the enclosed parking garage is located beneath other groups.

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

[F] 903.2.10.1 Commercial parking garages. An *automatic sprinkler system* shall be provided throughout buildings used for storage of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (4464 m^2).

[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 m^2) and where there is not provided at least one of the following types of *exterior wall* openings:

1. Openings below grade that lead directly to ground level by an exterior *stairway* complying with Section 1009 or an outside ramp complying with Section 1010. Openings shall be located in each 50 linear feet (15,240 mm), or fraction thereof, of *exterior wall* in the *story* on at least 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 m^2) in each 50 linear feet (15,240 mm) or fraction thereof, of *exterior wall* in the story on at least 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). Such openings shall be accessible to 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 as specified above 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. Chute sprinklers shall be accessible for servicing.

[F] 903.2.11.3 Buildings 55 feet or more in height. An *automatic sprinkler system* shall be installed throughout buildings with a floor level other than penthouses in compliance with Section 1509 [~~having an *occupant load* of 30 or more~~] that is located 55 feet (16,764 mm) or more above the lowest level of fire department vehicle access.

Exception[s]:

[~~1. Airport control towers.~~

~~2.~~] Open parking structures in compliance with Section 406.5.

[~~3. Occupancies in Group F-2.~~]

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

Exception: Ducts in which 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 system 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 also require the installation of a fire suppression 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 *Dallas* [~~*International*~~] *Fire Code*.

903.2.13 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.

2. Open air portions of Group A, Division 5 occupancies.

3. Open parking garages complying with Section 406.3.

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 m^2). Not more than one increase in floor area is permitted under this exception."

45. Subsection [F] 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended by adding a new Table 903.2.13, "Building Fire Area Limits (Sq. Ft.)," to read as follows:

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

GROUP	TYPE OF CONSTRUCTION								
	TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
	A	B	A	B	A	B	HT	A	B
A[1]	25,000	25,000	15,000	8,500	14,000	8,500	15,000	11,500	5,500
A[2, 3]	25,000	25,000	15,000	8,500	15,000	8,500	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	15,000	15,000	7,500
A-4[6]	@	@	@	@	@	@	@	@	@
A-5[7], B[8], E	35,000	35,000	20,000	15,000	20,000	15,000	20,000	15,000	7,500
B[9]	25,000	25,000	15,000	10,000	15,000	10,000	15,000	15,000	7,500
H, I-1, I-3, I-4	0	0	0	0	0	0	0	0	0
I-2	0	0	0	0	0	NP	0	0	NP
R	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
U[10]	@	@	@	@	@	@	@	@	@
U[11, 12]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

For SI: 1 foot = 305 mm, 1 square foot = 0.0929 m^2.
NP: Not Permitted
NA: Not Applicable

1. Assembly with a stage and occupant load of 1,000 or more.
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 406.3, 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."

46. Subsection [F] 903.3, "Installation Requirements," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 903.3 Installation requirements.** *Automatic sprinkler systems* shall be designed in accordance with Sections 903.3.1 through 903.3.7 [~~903.3.6~~].

[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 Section 903.3.1.1.1.

[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 any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.

2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when *approved* by the fire code official.

3. Generator and transformer rooms 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~~] E[e]levator machine rooms, [~~and~~] machinery spaces and hoistways, other than pits where such sprinlkers would not necessitate shunt trip requirements under any circumstances.

[6. ~~Machine rooms and machinery 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.

[F] 903.3.1.2 NFPA 13R sprinkler systems. *Automatic sprinkler systems* Group[~~s~~] R occupancies up to and including four stories in height shall be permitted to be installed throughout in accordance with NFPA 13R. Refer also to Section 903.3.1.1.2.

[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* where the building is of Type V construction, provided there is a roof or deck above. 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 Attics, open breezeways and attached garages. Sprinkler protection is required in attic spaces, open breezeways and attached garages of Group R buildings two or more stories in height.

[F] 903.3.1.3 NFPA 13D sprinkler systems. *Automatic sprinkler systems* installed in one- and two-family *dwellings*, Group R-3 and R-4 congregate residences 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] 903.3.1.3.1 Other considerations. Garages beneath usable floor space in fully sprinklered Group R-3 occupancies must be sprinklered.

[F] 903.3.2 Quick-response and residential sprinklers. Where *automatic sprinkler systems* are required by this code, quick-response or residential automatic sprinklers shall be installed in the following areas in accordance with Section 903.3.1 and their listings:

1. Throughout all spaces within a smoke compartment containing care recipient *sleeping units* in Group I-2 in accordance with this code.

2. Throughout all spaces within a smoke compartment containing treatment rooms in ambulatory care facilities.

3. *Dwelling units* and *sleeping units* in Group I-1 and R occupancies.

4. Light-hazard occupancies as defined in NFPA 13.

[F] 903.3.3 Obstructed locations. Automatic sprinklers shall be installed with due regard to obstructions that will delay activation or obstruct the water distribution pattern. Automatic sprinklers shall be installed in or under covered kiosks, displays, booths, concession stands, or equipment that exceeds 4 feet (1219 mm) in width. Not less than a 3-foot (914 mm) clearance shall be maintained between automatic sprinklers and the top of piles of combustible fibers.

Exception: Kitchen equipment under exhaust hoods protected with a fire-extinguishing system in accordance with Section 904.

[F] 903.3.4 Actuation. *Automatic sprinkler systems* shall be automatically actuated unless specifically provided for in this code.

[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 *Dallas* [~~*International*~~] *Plumbing Code*. Every fire protection system must be designed with a 10 psi safety factor. See Section 507.4 of the *Dallas Fire Code* 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] 903.3.5.1.1 Limited area sprinkler systems. Limited area sprinkler systems serving fewer than 20 sprinklers on any single connection are permitted to be connected to the domestic service where a wet automatic standpipe is not available. Limited area sprinkler systems connected to domestic water supplies shall comply with each of the following requirements:

1. Valves shall not be installed between the domestic water riser control valve and the sprinklers.

   Exception: An *approved* indicating control valve supervised in the open position in accordance with Section 903.4.

2. The domestic service shall be capable of supplying the simultaneous domestic demand and the sprinkler demand required to be hydraulically calculated by NFPA 13, NFPA 13D or NFPA 13R.

[F] 903.3.5.1.2 Residential combination services. A single combination water supply shall be allowed provided that the domestic demand is added to the sprinkler demand as required by NFPA 13R.

[F] 903.3.5.2 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 the Dallas [~~International~~] *Building Code*. 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.

Exception: Existing buildings.

[F] 903.3.6 Hose threads. Fire hose threads and fittings used in connection with *automatic sprinkler systems* shall be as prescribed by the fire code official. Fire hose threads used in connection with fire-extinguishing systems must be 2½-inch outlets and must have 7½ National standard fire hose coupling screw threads per inch.

[F] 903.3.7 Fire department connections. The location of the fire department connections must be in accordance with Section 912 of the *Dallas Fire Code*."

47. Subsection [F] 903.4, "Sprinkler System Supervision and Alarms," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 903.4 Sprinkler system supervision and alarms.** All valves 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 systems serving fewer than 20 sprinklers.
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.

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, when *approved* by the fire code official, shall sound an audible signal at a *constantly attended location*.

Exceptions:

1. Underground key or hub valves in roadway boxes provided by the municipality or public utility are not required to be monitored.

2. 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. 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 water-flow 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. The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection. 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."

48. Subsection [F] 904.1, "General," of Section 904, "Alternative Automatic Fire-Extinguishing Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended by adding a new Paragraph [F] 904.1.1, "Separation," to read as follows:

"**[F] 904.1.1 Separation.** Areas of buildings protected by an automatic fire-extinguishing system must be separated from unprotected areas by fire barriers complying with Section 707 having a minimum fire-resistance rating of 2 hours.

Exception: Special application, spray booth and kitchen hood suppression systems."

49. Subsection [F] 905.2, "Installation Standard," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2012 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 must be supervised with a high/low air pressure alarm with a minimum of 10 psig and a maximum of 40 psig."

50. Subsection [F] 905.3, "Required Installations," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2012 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 the floor level of the highest *story* is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access, or where 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 accordancie with Section 903.3.1.1 or 903.3.1.2.

2. Class I manual standpipes are allowed in *open parking garages* where the highest floor is located not more than 150 feet (45,720 mm) above the lowest level of fire department vehicle access.

3. Class I manual dry standpipes are allowed in *open parking garages* that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.

4. Class I standpipes are allowed in basements equipped throughout with an *automatic sprinkler system.*

5. In determining the lowest level of fire department vehicle access, it shall not be required to consider:

   5.1. Recessed loading docks for four vehicles or less; or

   5.2. 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.

[~~**Exceptions:**~~

~~1. Open-air seating spaces without enclosed spaces.~~

~~2. 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 most hydraulically 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 enclosed 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 m^2) 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 Dallas [~~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 Rooftop gardens and landscaped roofs. Buildings or structures that have rooftop gardens or landscaped roofs and that are equipped with a standpipe system shall have the standpipe system extended to the roof level on which the rooftop garden or landscaped roof is located.

[F] 905.3.9 Building area. In buildings exceeding 10,000 square feet (929.03 m^2) 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.

Exception: Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14."

51. Subsection [F] 905.4, "Location of Class I Standpipe Hose Connections," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2012 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 *stairway*, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, unless otherwise *approved* by the fire code official.

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 *exit stairway* hose connections 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 *exit stairway* hose connections 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 four units vertical in 12 units horizontal (33.3-percent slope), each standpipe must be provided with a two-way hose connection [~~shall be~~] located to serve the roof or at the highest landing of a stairway with stair access to the roof provided in accordance with Section 1009.16.

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.

[F] 905.4.1 Protection. Risers and laterals of Class I standpipe systems not located within an enclosed *stairway* or pressurized enclosure 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 enclosed *stairway* or pressurized enclosure are not required to be enclosed within fire-resistance-rate 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.

[F] 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) and a maximum of 40 psig (276 kPa) air pressure with a high/low alarm."

52. Subsection [F] 905.9, "Valve Supervision," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 905.9 Valve supervision.** Valves controlling water supplies shall be supervised in the open position so that a change in the normal position of the valve will generate a supervisory signal at the supervising station required by Section 903.4. Where a fire alarm system is provided, a signal shall also be transmitted to the control unit.

Exceptions:

1. Valves to underground key or hub valves in roadway boxes provided by the municipality or public utility 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 detection 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, but not exceeding 90 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."

53. [F] Table 906.3(1), "Fire Extinguishers for Class A Fire Hazards," of Subsection [F] 906.3, "Size and Distribution," of Section 906, "Portable Fire Extinguishers," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] TABLE 906.3(1)**
FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS

	LIGHT (Low) HAZARD OCCUPANCY	ORDINARY (Moderate) HAZARD OCCUPANCY	EXTRA (high) HAZARD OCCUPANCY
Minimum Rated Single Extinguisher	2-A[e]	2-A	4-A[a]
Maximum Floor Area Per Unit of A	3,000 square feet	1,500 square feet	1,000 square feet
Maximum Floor Area for Extinguisher[b]	11,250 square feet	11,250 square feet	11,250 square feet
Maximum Travel Distance to Extinguisher	75 feet	75 feet	75 feet

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2, 1 gallon = 3.785 L.

a. Two 2½-gallon water-type extinguishers shall be deemed the equivalent of one 4-A rated extinguisher.

b. Annex E.3.3 of NFPA 10 provides more details concerning application of the maximum floor area criteria.

[e. ~~Two water-type extinguishers each with a 1-A rating shall be deemed the equivalent of one 2-A rated extinguisher for Light (Low) Hazard Occupancies.~~]"

54. Subsection [F] 907.1, "General," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2012 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. Provisions of the *Dallas Fire Code* govern in the event of conflicts between this section and the corresponding section of the *Dallas Fire Code.*

[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 *Dallas* [~~*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 submitted for review and approval prior to system installation, and shall include, but not be limited to, all of the following:

1. A floor plan that indicates the use of all rooms.
2. Locations of alarm-initiating devices.
3. Locations of alarm notification appliances, including candela ratings for visible alarm notification appliances.
4. Location of fire alarm control unit, transponders and notification power supplies.
5. Annunciators.
6. Power connection.
7. Battery calculations.
8. Conductor type and sizes.
9. Voltage drop calculations.
10. Manufacturer's data sheets indicating model numbers and listing information for equipment, devices and materials.
11. Details of ceiling height and construction.
12. The interface of fire safety control functions.
13. Classification of the supervising station.

[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.

907.1.3.1 Prohibited equipment. 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 must be addressable. Alarm systems serving more than 20 smoke detectors must 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 exceeds 30 percent of the building area. When cumulative building remodel or expansion exceeds 50 percent of the building area, the fire alarm system must 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."

55. 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 Systems," of the 2012 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 having an [~~where the~~] occupant load of [~~due to the assembly occupancy is~~] 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.9 shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy. 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 and automatic fire detection 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 activate throughout the notification zones upon sprinkler waterflow.

[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."

56. 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 Systems," of the 2012 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 must be provided with smoke detectors in all areas utilized by children. When *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 of open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. A manual fire alarm system is not required in Group E educational and day care occupancies with an *occupant load* of less than 30 [~~or less~~] when provided with an approved automatic sprinkler system.

2. [~~Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:~~

   ~~2.1. Interior *corridors* are protected by smoke detectors.~~

   ~~2.2. Auditoriums, cafeterias, gymnasiums and similar areas are protected by *heat detectors* or other *approved* detection devices.~~

~~2.3. Shops and laboratories involving dusts or vapors are protected by *heat detectors* or other *approved* detection devices.~~

~~3.~~] Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, the emergency voice/alarm communication system will activate on sprinkler water flow and manual activation is provided from an normally occupied location.

3. 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.)

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

57. 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 Systems," of the 2012 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, [~~or~~] 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."

58. Subparagraph [F] 907.2.9.3, "Group R-2 College and University Buildings," of Paragraph [F] 907.2.9, "Group R-2," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is retitled as Subparagraph [F] 907.2.9.3, "Group R-2 Buildings," and amended to read as follows:

"**[F] 907.2.9.3 Group R-2 [~~college and university~~] buildings.** An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 [~~college and university~~] buildings in the following locations:

1. Common spaces outside of *dwelling units* and *sleeping units*.

2. Laundry rooms, mechanical equipment rooms, and storage rooms.

3. All interior corridors serving *sleeping units* or *dwelling units*.

Required smoke alarms in *dwelling units* and *sleeping units* in Group R-2 [~~college and university~~] buildings shall be interconnected with the fire alarm system in accordance with NFPA 72.

Exception: An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* or *dwelling units* and where each *sleeping unit* or *dwelling unit* either has a *means of egress* door opening directly to an exterior *exit access* that leads directly to an *exit* or a *means of egress* door opening directly to an exit."

59. Paragraph [F] 907.2.11, "Single- and Multiple-Station Smoke Alarms," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 907.2.11 Single- and multiple-station smoke alarms.** *Listed* single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with Sections 907.2.11.1 through 907.2.11.4 and NFPA 72. System smoke detectors may be allowed in lieu of single- or multiple-station smoke detectors provided they are equipped with integral notification and report to the fire alarm panel as supervisory alarms.

[F] 907.2.11.1 Group R-1. Single- or multiple-station smoke alarms shall be installed in all of the following locations in Group R-1:

1. In sleeping areas.

2. In every room in the path of the *means of egress* from the sleeping area to the door leading from the *sleeping unit*.

3. In each *story* within the *sleeping unit*, including basements. For *sleeping units* with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full *story* below the upper level.

[F] 907.2.11.2 Groups R-2, R-3, R-4 and I-1. Single- or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and I-1 regardless of *occupant load* at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.

2. In each room used for sleeping purposes.

   Exception: Single- or multiple-station smoke alarms in Group I-1 shall not be required where smoke detectors are provided in the sleeping rooms as part of an automatic smoke detection system.

3. In each *story* within a *dwelling unit*, including basements but not including crawl spaces and uninhabitable *attics*. In *dwellings* or *dwelling units* with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full *story* below the upper level.

[F] 907.2.11.3 Interconnection. Where more than one smoke alarm is required to be installed within an individual *dwelling unit* or *sleeping unit* in Group R or I-1 occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

[F] 907.2.11.4 Power source. In new construction, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a batter backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are not required to be equipped with batter backup where they are connected to an emergency electrical system."

60. 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 Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 907.2.13 High-rise buildings.** [~~High-rise~~] B[~~b~~]uildings with an occupied floor 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.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and 412.

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 907.2.10, 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 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 m^3/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 (m^3/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 emergency responder radio coverage system in accordance with Section 510 of the *Dallas* [~~*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 enclosed *exit stairways*. The fire department communication device shall be provided at each floor level within the enclosed *exit stairway*."

61. 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 Systems," of the 2012 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 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.

[F] 907.4.2.1 Location. Manual fire alarm boxes shall be located not more than 5 feet (1542 mm) from the entrance to each *exit*. Additional manual fire alarm boxes shall be located so that travel distance 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 a minimum of 42 inches (1067 mm) and a maximum of 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 approved existing fire alarm systems are not monitored by a supervising station, 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."

62. 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 Systems," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2012 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 Dallas [~~International~~] *Fire Code*. In high-rise buildings, the system shall operate on a minimum of 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. *Exit stairways*.
3. Each floor.
4. *Areas of refuge* as defined in Section 1002.1.

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 also 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 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 are required to caption audible public announcements in accordance with Section 1108.2.7.2, the emergency/voice alarm communication system shall also be captioned. 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 Emergency power. Emergency voice/alarm communications systems shall be provided with an *approved* emergency power source."

63. 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 Systems," of the 2012 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 907.5.2.3.4. Visual alarm notification appliances must be provided where an existing fire alarm system is upgraded, altered or a new fire alarm system is installed.

Exceptions:

1. Visible alarm notification appliances are not required in storage areas of Group S occupancies [~~*alternations*, 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 Section 1002.1.

3. Visible alarm notification appliances shall not be required in elevator cars.

[F] 907.5.2.3.1 Public and common areas. Visible alarm notification appliances shall be provided in public areas and common areas.

[F] 907.5.2.3.2 Employee work areas. Where employee work areas have audible alarm coverage, the notification appliance circuits serving the employee work areas shall be initially designed with a minimum of 20-percent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing impaired employee(s).

[F] 907.5.2.3.3 Groups I-1 and R-1. Group I-1 and R-1 *dwelling units* or *sleeping units* in accordance with Table 907.5.2.3.3 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system.

[F] 907.5.2.3.4 Group R-2. In Group R-2 occupancies required by Section 907 to have a fire alarm system, all dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances in accordance with Chapter 10 of ICC A117.1. Such capability shall be permitted to include the potential for future interconnection of the building fire alarm system with the unit smoke alarms, replacement of audible appliances with combination audible/visible appliances, or future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances."

64. Paragraph [F] 907.6.1, "Wiring," of Subsection [F] 907.6, "Installation," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended by adding a new Subparagraph 907.6.1.1, "Installation," to read as follows:

"**[F] 907.6.1.1 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" wired with a minimum of 6 feet of separation between supply and return circuit conductors. All fire alarm systems must be wired as follows: IDC – Class A style – D; SLC – Class A style 6; NAC Class B style Y. Provide a minimum 6 foot (1829 mm) separation between supply and return loops in all Class C wired circuits.

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

65. Paragraph [F] 907.6.5, "Monitoring," of Subsection [F] 907.6, "Installation," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 907.6.5 Monitoring.** Fire alarm systems required by this chapter, by other chapters of this code, or by the *Dallas* [~~*International*~~] *Fire Code* shall be monitored by 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] 907.6.5.1 Automatic telephone-dialing devices. Automatic telephone-dialing devices used to transmit an emergency alarm shall not be connected to any fire department telephone number unless *approved* by the fire chief.

[F] 907.6.5.2 Termination of monitoring service. Termination of fire alarm monitoring services shall be in accordance with Section 901.9 of the *Dallas* [~~*International*~~] *Fire Code*."

66. Subsection [F] 907.7, "Acceptance Tests and Completion," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2012 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 and approved in accordance with NFPA 72 and Section 901.5 of the *Dallas Fire Code*.

[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 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 ("as-builts") and equipment specifications shall be provided at an *approved* location."

67. Subsection [F] 910.1, "General," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 910.1 General.** Where required by this code or otherwise installed, smoke and heat vents, or mechanical smoke exhaust systems, and draft curtains shall conform to the requirements of this section.

Exceptions:

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

2. Where areas of buildings are equipped with early suppression fast-response (ESFR) sprinklers, only manual [~~automatic~~] smoke and heat vents shall [~~not~~] be required within these areas. Automatic smoke and heat vents are prohibited."

68. Subsection [F] 910.2, "Where Required," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 910.2 Where required.** Smoke and heat vents shall be installed in the roofs of buildings or portions thereof occupied for the uses set forth in Sections 910.2.1 through 910.2.4 [~~and 910.2.2~~].

Exceptions:

1. In occupied portions of a building where the upper surface of the story is not a roof assembly, mechanical smoke exhaust in accordance with Section 910.4 shall be an acceptable alternative.

2. Smoke and heat vents are not required in buildings protected throughout by an approved automatic sprinkler system. Any smoke and heat vents installed as a substitute for a requirement, a reduction of a requirement or an increase in the limits of another requirement is considered a required system.

[F] 910.2.1 Group F-1 or S-1. Buildings and portions thereof used as a Group F-1 or S-1 occupancy having more than 50,000 square feet (4645 m^2) in undivided area.

Exception: Group S-1 aircraft repair hangars.

[F] 910.2.2 High-piled combustible storage. Buildings and portions thereof containing high-piled combustible stock or rack storage in any occupancy group in accordance with Section 413 and the *Dallas* [~~*International*~~] *Fire Code*.

910.2.3 Group H. 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 m^2) 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.

[F] 907.2.4 Exit access travel distance increase. Buildings and portions thereof used as a Group F-1 or S-1 occupancy where the maximum exit access travel distance is increased in accordance with Section 1016.2.2."

69. [F] Table 910.3, "Requirements for Draft Curtains and Smoke and Heat Vents," of Subsection [F] 910.3, "Design and Installation," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"[F] TABLE 910.3
REQUIREMENTS FOR DRAFT CURTAINS
AND SMOKE AND HEAT VENTS[a]

OCCUPANCY GROUP AND COMMODITY CLASSIFICATION	DESIGNED STORAGE HEIGHT (feet)	MINIMUM DRAFT CURTAIN DEPTH (feet)	MAXIMUM AREA FORMED BY DRAFT CURTAINS (square feet)	VENT-AREA-TO-FLOOR-AREA RATIO[c]	MAXIMUM SPACING OF VENT CENTERS (feet)	MAXIMUM DISTANCE FROM VENTS TO WALL OR DRAFT CURTAINS[b] (feet)
Group F-1, H and S-1	--	$0.2 \times H^d$ but ≥ 4	50,000	1:100	120	60
High-piled Storage (see Section 910.2.2) Class I-IV commodities (Option 1)	≤20	6	10,000	1:100	100	60
	>20 ≤40	6	8,000	1:75	100	55
High-piled Storage (see Section 910.2.2) Class I-IV commodities (Option 2)	≤20	4	3,000	1:75	100	55
	>20 ≤40	4	3,000	1:50	100	50
High-piled Storage (see Section 910.2.2) High-hazard commodities (Option 1)	≤20	6	6,000	1:50	100	50
	>20 ≤30	6	6,000	1:40	90	45
High-piled Storage (see Section 910.2.2) High-hazard commodities (Option 2)	≤20	4	4,000	1:50	100	50
	>20 ≤30	4	2,000	1:30	75	40

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

a. Additional requirements for rack storage heights in excess of those indicated shall be in accordance with Chapter 32 of the *Dallas* [~~*International*~~] *Fire Code*. For solid-piled storage heights in excess of those indicated, an approved engineered design shall be used.

b. Vents adjacent to walls or draft curtains shall be located within a horizontal distance not greater than the maximum distance specified in this column as measured perpendicular to the wall or draft curtain that forms the perimeter of the draft curtain area.

c. Where draft curtains are not required, the vent area to floor are ratio shall be calculated based on a minimum draft curtain depth of 6 feet (Option 1).

d. "H" is the height of the vent, in feet, above the floor."

70. Subparagraph [F] 910.3.2.2, "Sprinklered Buildings," of Paragraph [F] 910.3.2, "Vent Operation," of Subsection [F] 910.3, "Design and Installation," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 910.3.2.2 Sprinklered buildings.** Where installed in buildings provided with an *approved automatic sprinkler system* that are not Early Suppression Fast Response (ESFR), smoke and heat vents shall be designed to operate automatically. The automatic operating mechanism of the smoke and heat vents must operate at a temperature rating at least 100° F (38° C) greater than the temperature rating of the sprinklers installed."

71. Paragraph [F] 911.1.5, "Required Features," of Subsection [F] 911.1, "General," of Section 911, "Fire Command Center," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"**[F] 911.1.5 Required features.** The fire command center shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system control unit.
2. The fire department communications system when approved by the fire code official.
3. Fire detection and alarm system annunciator.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air distribution systems if mechanical air-handling equipment is used for smoke removal purposes in accordance with Section 403.4.6.
6. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking *stairway* doors simultaneously.
8. Sprinkler valve and waterflow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, *means of egress*, fire protection systems, fire-fighting equipment and fire department access and the location of *fire walls, fire barriers, fire partitions, smoke barriers* and smoke partitions.

13. An *approved* Building Information Card that contains, but is not limited to, the following information:

    13.1. General building information that includes: property name, address, the number of floors in the building (above and below grade), use and occupancy classification (for mixed uses, identify the different types of occupancies on each floor), estimated building population (i.e., day, night, weekend);

    13.2. Building emergency contact information that includes: a list of the building's emergency contacts (e.g., building manager, building engineer, etc.) and their respective work phone number, cell phone number, e-mail address;

    13.3. Building construction information that includes: the type of building construction (e.g. floors, walls, columns, and roof assembly);

    13.4. *Exit stair* information that includes: number of *exit stairs* in building, each *exit stair* designation and floors served, location where each *exit stair* discharges, *exit stairs* that are pressurized, *exit stairs* provided with emergency lighting, each *exit stair* that allows reentry, *exit stairs* providing roof access; elevator information that includes: number of elevator banks, elevator bank designation, elevator car numbers and respective floors that they serve, location of elevator machine rooms, location of sky lobby, location of freight elevator banks;

    13.5. Building services and system information that includes: location of mechanical rooms, location of building management system, location and capacity of all fuel oil tanks, location of emergency generator, location of natural gas service;

    13.6. Fire protection system information that includes: locations of standpipes, location of fire pump room, location of fire department connections, floors protected by automatic sprinklers, location of different types of sprinkler systems installed (e.g., dry, wet, pre-action, etc.); and

    13.7. Hazardous material information that includes: location of hazardous material, quantity of hazardous material.

14. Work table.

15. Generator supervision devices, manual start and transfer features.

16. Public address system, where specifically required by other sections of this code.

17. Elevator fire recall switch in accordance with ASME A17.1.

18. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided."

72. Section 912, "Fire Department Connections," of Chapter 9, "Fire Protection Systems," of the 2012 International Building Code is amended to read as follows:

"SECTION 912
FIRE DEPARTMENT CONNECTIONS

[F] 912.1 Installation. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with Sections 912.2 through 912.7 [~~912.5~~].

[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. The location of fire department connections shall be *approved* by the fire chief. Fire apparatus access roads are required within 50 feet (15,240 mm) of any fire department hose connections. A fire department hose connection must be located within 400 feet (122 m) of an approved fire hydrant.

[F] 912.2.1 Visible location. Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise *approved* by the fire chief.

[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" at least 6 inches (152 mm) high and words in letters at least 2 inches (51 mm) high or an arrow to indicate the location. All such signs shall be subject to the approval of the fire code official.

[F] 912.2.3 Remote and free standing fire department connections. Freestanding fire department connections must 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 must be provided.

[F] 912.3 Access. Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other fixed or moveable object. Access to fire department connections shall be *approved* by the fire chief.

Exception: Fences, where provided with an access gate equipped with a sign complying with the legend requirements of Section 912.4 and a means of emergency operation. The gate and the means of emergency operation shall be *approved* by the fire chief and maintained operational at all times.

[F] 912.3.1 Locking fire department connections caps. The fire code official is authorized to require locking caps on fire department connections for water-based *fire protection systems* where the responding fire department carries appropriate key wrenches for removal.

[F] 912.3.2 Clear space around connections. A working space of not less than 36 inches (762 mm) in width, 36 inches (914 mm) in depth and 78 inches (1981 mm) in height shall be provided and maintained in front of and to the sides of wall-mounted fire department connections and around the circumference of free-standing fire department connections, except as otherwise required or *approved* by the fire chief.

[F] 912.3.3 Physical protection. Where fire department connections are subject to impact by a motor vehicle, vehicle impact protection shall be provided in accordance with Section 312 of the Dallas [~~International~~] *Fire Code*.

[F] 912.4 Signs. A metal sign with raised letters at least 1 inch (25 mm) in size shall be mounted on all fire department connections serving automatic sprinklers, standpipes or fire pump connections. Such signs shall read: AUTOMATIC SPRINKLERS or STANDPIPES or TEST CONNECTION or a combination thereof as applicable. Where the fire department connection does not serve the entire building, a sign shall be provided indicating the portions of the building served.

[F] 912.5 Backflow protection. The potable water supply to automatic sprinkler and standpipe systems shall be protected against backflow as required by the Dallas [~~International~~] *Plumbing Code*.

[F] 912.6 Fire department hose connections. Fire department hose connections, as specified by NFPA 14, must consist of approved two-way or four-way inlet Siamese connections, based on the calculated fire-flow requirements of the system served using hydraulic calculations or 250 gallons per minute (15.77 L/S) per inlet. All connections must have hose threads compatible with those specified in Section 912.7.

[F] 912.7 Hose threads. Fire hose threads used in connection with fire-extinguishing systems must be as follows:

1. 2½-inch (64 mm) outlets must have 7½ national standard fire hose coupling screw threads per inch.

2. Class II or III standpipe systems must have 1-inch (25 mm) outlets with 11½ American standard taper pipe threads per inch."

73. Subsection [F] 913.1, "General," of Section 913, "Fire Pumps," of Chapter 9, "Fire Protection Systems," of the 2012 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, the *Dallas Fire Code* and NFPA 20."

74. Subsection [F] 913.4, "Valve Supervision," of Section 913, "Fire Pumps," of Chapter 9, "Fire Protection Systems," of the 2012 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.~~

~~4. Sealing of valves and *approved* weekly recorded inspection where valves are located within fenced enclosures under the control of the owner.~~]

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

75. Subsection 1003.1, "Applicability," of Section 1003, "General Means of Egress," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1003.1 Applicability.** The general requirements specified in Sections 1003 through 1013 shall apply to all three elements of the *means of egress* system, in addition to those specific requirements for the *exit access*, the *exit* and the *exit discharge* detailed elsewhere in this chapter. If there is a conflict between the provisions of this chapter and the corresponding chapter of the *Dallas Fire Code*, this chapter prevails."

76. Paragraph 1004.1.2, "Areas Without Fixed Seating," of Subsection 1004.1, "Design Occupant Load," of Section 1004, "Occupant Load," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1004.1.2 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 1004.1.2. For areas without *fixed seating*, the occupant load shall not be 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 1004.1.2. Where an intended function is not listed in Table 1004.1.2, 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*.~~]"

77. Subsection 1004.5, "Outdoor Areas," of Section 1004, "Occupant Load," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1004.5 Outdoor areas.** *Yards*, patios, *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.

Exceptions:

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 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."

78. Subsection 1007.1, "Accessible Means of Egress Required," of Section 1007, "Accessible Means of Egress," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1007.1 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* are required by Section 1015.1 or 1021.1 from any *accessible* space, each *accessible* portion of the space shall be served by not less than two *accessible means of egress*.

Exceptions:

1. *Accessible means of egress* are not required in alterations to existing buildings.

2. One *accessible means of egress* is required from an *accessible mezzanine* level in accordance with Section 1007.3, 1007.4 or 1007.5.

3. In assembly areas with sloped or stepped *aisles*, one *accessible means of egress* is permitted where the common path of travel is *accessible* and meets the requirements in Section 1028.8.

4. *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."

79. Subsection 1007.5, "Platform Lifts," of Section 1007, "Accessible Means of Egress," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1007.5 Platform lifts.** Platform (wheelchair) lifts shall not serve as part of an *accessible means of egress*, except where allowed as part of a required *accessible route* in Section 1109.8 [~~1109.7~~], Items 1 through 10 [9]. Standby power shall be provided in accordance with Chapter 27 for platform lifts permitted to serve as part of a *means of egress*.

1007.5.1 Openness. Platform lifts on an *accessible means of egress* shall not be installed in a fully enclosed hoistway."

80. Subsection 1008.1, "Doors," of Section 1008, "Doors, Gates and Turnstiles," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1008.1 Doors.** *Means of egress* doors shall meet the requirements of this section. Doors serving a *means of egress* system shall meet the requirements of this section and Section 1020.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section.

Security devices affecting *means of egress* are subject to this code and inspections by the fire code official. (See *Dallas Fire Code* Section 1030.2.)

Means of egress doors 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.

1008.1.1 Size of doors. The minimum width of each door opening shall be sufficient for the *occupant load* thereof and shall provide a clear width of 32 inches (813 mm). Clear openings 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 width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 32 inches (813 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. *Means of egress* doors in a Group I-2 occupancy used for the movement of beds shall provide a clear width not less than 41½ inches (1054 mm). The height of door openings shall not be less than 80 inches (2032 mm).

Exceptions:

1. The minimum and maximum width shall not apply to door openings that are not part of the required *means of egress* in Group R-2 and R-3 occupancies.

2. Door openings to resident *sleeping units* in Group I-3 occupancies shall have a clear width of not less than 28 inches (711 mm).

3. Door openings to storage closets less than 10 square feet (0.93 m^2) in area shall not be limited by the minimum width.

4. Width of door leaves in revolving doors that comply with Section 1008.1.4.1 shall not be limited.

5. Door openings within a *dwelling unit* or *sleeping unit* shall not be less than 78 inches (1981 mm) in height.

6. Exterior door openings in *dwelling units* and *sleeping units*, other than the required *exit* door, shall not be less than 76 inches (1930 mm) in height.

7. In other than Group R-1 occupancies, the minimum widths shall not apply to interior egress doors within a *dwelling unit* or *sleeping unit* that is not required to be an *Accessible unit*, *Type A unit* or *Type B unit*.

8. Door openings required to be *accessible* within *Type B units* shall have a minimum clear width of 31.75 inches (806 mm).

1008.1.1.1 Projections into clear width. There shall not be projections into the required clear 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 and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

1008.1.2 Door swing. Egress doors shall be of the pivoted or side-hinged swinging type.

Exceptions:

1. Private garages, office areas, factor 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, revloving doors complying with Section 1008.1.4.1.

6. In other than Group H occupancies, horizontal sliding doors complying with Section 1008.1.4.3 are permitted in a *means of egress*.

7. Power-operated doors in accordance with Section 1008.1.4.2.

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.

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.

1008.1.3 Door opening force. The force for pushing or pulling open interior swinging egress doors, other than *fire doors*, shall not exceed 5 pounds (22 N). For other swinging doors, as well as sliding and folding doors, the door latch shall release when subjected to a 15-pound (67 N) force. The door shall be set in motion when subjected to a 30-pound (133 N) force. The door shall swing to a full-open position when subjected to a 15 pound (67 N) force.

1008.1.3.1 Location of applied forces. Forces shall be applied to the latch side of the door.

1008.1.4 Special doors. Special doors and security grilles shall comply with the requirements of Sections 1008.1.4.1 through 1008.1.4.4.

1008.1.4.1 Revolving doors. Revolving doors shall comply with the following:

1. Each revolving door shall be capable of collapsing into a bookfold position with parallel egress paths providing an aggregate width of 36 inches (914 mm).

2. A revolving door shall not be located within 10 feet (3048 mm) of the foot or top of *stairs* or escalators. A dispersal area shall be provided between the *stairs* or escalators and the revolving doors.

3. The revolutions per minute (rpm) for a revolving door shall not exceed those shown in Table 1008.1.4.1.

4. Each revolving door shall have a side-hinged swinging door which complies with Section 1008.1 in the same wall and within 10 feet (3048 mm) of the revolving door.

5. Revolving doors shall not be part of an *accessible route* required by Section 1007 and Chapter 11.

1008.1.4.1.1 Egress component. A revolving door used as a component of a *means of egress* shall comply with Section 1008.1.4.1 and the following three conditions:

1. Revolving doors shall not be given credit for more than 50 percent of the required egress capacity.

2. Each revolving door shall be credited with no more than 50-person capacity.

3. Each revolving door shall be capable of being collapse when a force of not more than 130 pounds (578 N) is applied within 3 inches (76 mm) of the outer edge of a wing.

1008.1.4.1.2 Other than egress component. A revolving door used as other than a component of a *means of egress* shall comply with Section 1008.1.4.1. The collapsing force of a revolving door not used as a component of a *means of egress* shall not be more than 180 pounds (801 N).

Exception: A collapsing force in excess of 180 pounds (801 N) is permitted if the collapsing force is reduced to not more than 130 pounds (578 N) when at least one of the following conditions is satisfied:

1. There is a power failure or power is removed to the device holding the door wings in position.

2. There is an actuation of the *automatic sprinkler system* where such system is provided.

3. There is an actuation of a smoke detection system which is installed in accordance with Section 907 to provide coverage in areas within the building which are within 75 feet (22,860 mm) of the revolving doors.

4. There is an actuation of a manual control switch, in an *approved* location and clearly defined, which reduces the holding force to below the 130-pound (578 N) force level.

1008.1.4.2 Power-operated doors. Where *means of egress* doors are operated by power, such as doors with a photoelectric-actuated mechanism to open the door upon the approach of a person, or doors with power-assisted manual operation, the design shall be such that in the event of a power failure, the door is capable of being opened manually to permit *means of egress* travel or closed where necessary to safeguard *means of egress*. The forces required to open these doors manually shall not exceed those specified in Section 1008.1.3, except that the force to set the door in motion shall not exceed 50 pounds (220 N). The door shall be capable of swinging from any position to the full width of the opening in which such door is installed when a force is applied to the door on the side from which egress is made. Full-power-operated doors shall comply with BHMA A156.10. Power-assisted and low-energy doors shall comply with BHMA A156.19.

Exceptions:

1. Occupancies in Group I-3.

2. Horizontal sliding doors complying with Section 1008.1.4.3.

3. For a biparting door in the emergency break-out mode, a door leaf located within a multiple-leaf opening shall be exempt from the minimum 32-inch (813 mm) single-leaf requirements of Section 1008.1.1, provided a minimum 32-inch (813 mm) clear opening is provided when the two biparting leaves meeting in the center are broken out.

1008.1.4.3 Horizontal sliding doors. In other than Group H occupancies, horizontal sliding doors permitted to be a component of a *means of egress* in accordance with Exception 6 to Section 1008.1.2 shall comply with all of the following criteria:

1. The doors shall be power operated and shall be capable of being operated manually in the event of power failure.

2. The doors shall be openable by a simple method from both sides without special knowledge or effort.

3. The force required to operate the door shall not exceed 30 pounds (133 N) to set the door in motion and 15 pounds (67 N) to close the door or open it to the minimum required width.

4. The door shall be openable with a force not to exceed 15 pounds (67 N) when a force of 250 pounds (1100 N) is applied perpendicular to the door adjacent to the operating device.

5. The door assembly shall comply with the applicable *fire protection rating* and, where rated, shall be self-closing or automatic closing by smoke detection in accordance with Section 716.5.9.3, shall be installed in accordance with NFPA 80 and shall comply with Section 716.

6. The door assembly shall have an integrated standby power supply.

7. The door assembly power supply shall be electrically supervised.

8. The door shall open to the minimum required width within 10 seconds after activation of the operating device.

1008.1.4.4 Security grilles. In Groups B, F, M and S, horizontal sliding or vertical security grilles are permitted at the main *exit* and shall be openable from the inside without the use of a key or special knowledge or effort during periods that the space is occupied. The grilles shall remain secured in the full-open position during the period of occupancy by the general public. Where two or more *means of egress* are required, not more than one-half of the *exits* or *exit access doorways* shall be equipped with horizontal sliding or vertical grilles.

1008.1.5 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).

Exceptions:

1. Doors serving individual *dwelling units* in Groups R-2 and R-3 where the following apply:

   1.1. A door is permitted to open at the top step of an interior *flight* of *stairs*, provided the door does not swing over the top step.

   1.2. Screen doors and storm doors are permitted to swing over *stairs* or landings.

2. Exterior doors as provided for in Section 1003.5, Exception 1, and Section 1020.2, which are not on an *accessible route*.

3. In Group R-3 occupancies not required to be *Accessible units, Type A units* or *Type B units*, the landing at an exterior doorway shall not be more than 7¾ inches (197 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door, does not swing over the landing.

4. Variations in elevation due to differences in finish materials, but not more than ½ inch (12.7 mm).

5. Exterior decks, patios or balconies that are part of *Type B* dwelling units, 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.

1008.1.6 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).

1008.1.7 Thresholds. Thresholds at doorways shall not exceed ¾ inch (19.1 mm) in height above the finished floor or landing for sliding doors serving *dwelling units* or ½ inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than ¼ 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).

Exception: 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. The door is not part of the required *means of egress*.
2. The door is not part of an *accessible route* as required by Chapter 11.
3. The door is not part of and *Accessible unit, Type A unit* or *Type B unit*.

1008.1.8 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.

Exceptions:

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.

1008.1.9 Door operations. Except as specifically permitted by this section egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

1008.1.9.1 Hardware. Door handles, pulls, latches, locks and other operating devices on doors required to be *accessible* by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate.

1008.1.9.2 Hardware height. Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (846 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.

1008.1.9.3 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

1. Places of detention or restraint.

2. In buildings in occupancy Group A having an *occupant load* of 300 or less, Groups B, F, M and S, and in *places of religious worship,* the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:

   2.1. The locking device is readily distinguishable as locked;

   2.2. A readily visible durable sign is posted on the egress side or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background; and

   2.3. The use of the key-operated locking device is revocable by the *building official* for due cause.

3. Where egress doors are used in pairs, *approved* automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface mounted hardware.

4. Doors from individual *dwelling* or *sleeping units* of Group R occupancies having an *occupant load* of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.

4. *Fire doors* after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.

1008.1.9.4 Bolt locks. Manually operated flush bolts or surface bolts are not permitted.

Exceptions:

1. On doors not required for egress in individual dwelling units or sleeping units.

2. Where a pair of doors serves a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf.

3. Where a pair of doors serves an *occupant load* of less than 50 persons in a Group B, F or S occupancy, manually operated edge- or surface mounted bolts are permitted on the inactive leaf. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.

4. Where a pair of doors serves a Group A, B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress width requirements and the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.

5. Where a pair of doors serves patient care rooms in Group I-2 occupancies, self-latching edge- or surface-mounted bolts are permitted on the inactive leaf provided that the inactive leaf is not needed to meet egress width requirements and the inactive leaf contains no doorknobs, panic bars or similar operating hardware.

1008.1.9.5 Unlatching. The unlatching of any door or leaf shall not require more than one operation.

Exceptions:

1. Places of detention or restraint.

2. Where manually operated bolt locks are permitted by Section 1008.1.9.4.

3. Doors with automatic flush bolts as permitted by Section 1008.1.9.3, Exception 3.

4. Doors from individual dwelling units and sleeping units of Group R occupancies as permitted by Section 1008.1.9.3, Exception 4.

1008.1.9.5.1 Closet and bathroom doors in Group R-4 occupancies. In Group R-4 occupancies, closet doors that latch in the closed position shall be openable from inside the closet, and bathroom doors that latch in the closed position shall be capable of being unlocked from the ingress side.

1008.1.9.6 Special locking arrangements in Group I-2. *Approved* special egress locks shall be permitted in a Group I-2 occupancy where the clinical needs of persons receiving care require such locking. Special egress locks shall be permitted in such occupancies where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with Items 1 through 7.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.

2. The doors unlock upon loss of power controlling the lock or lock mechanism.

3. The door locks shall have the capability of being unlocked by a signal from the *fire command center*, a nursing station or other *approved* location.

4. A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an *exit*.

5. The procedures for the operation(s) of the unlocking system shall be described and *approved* as part of the emergency planning and preparedness required by Chapter 4 of the Dallas [~~International~~] *Fire Code*.

6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.

7. Emergency lighting shall be provided at the door.

Exception: Items 1 through 4 shall not apply to doors to areas where persons, which because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area or a maternity ward.

1008.1.9.7 Delayed egress locks. *Approved*, *listed*, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an *exit*.

1. The doors unlock upon actuation of the *automatic sprinkler system* or automatic fire detection system.

2. The doors unlock upon loss of power controlling the lock or lock mechanism.

3. The door locks shall have the capability of being unlocked by a signal from the fire command center.

4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

   Exception: Where *approved*, a delay of not more than 30 seconds is permitted.

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.

6. Emergency lighting shall be provided at the door.

1008.1.9.8 Access-controlled egress doors. The entrance doors in a *means of egress* in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2, and entrance doors to tenant spaces in occupancies in Groups A, B, E, I-2, M, R-1 or R-2, are permitted to be equipped with an *approved* entrance and egress access control system, listed in accordance with UL 294, which shall be installed in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.

2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.

3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of the access control system electronics—and the doors shall remain unlocked for a minimum of 30 seconds.

4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.

5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has reset.

6. 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.

1008.1.9.9 Electromagnetically locked egress doors/ electronic locking devices. 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.

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

1008.1.9.9.1 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 hospitals or Alzheimer care as further specified in Section 1008.1.9.9.4.

2. Locations where national security interests are present with approval of the *building official*.

3. Modified arrangements may be made for hospital nursery wards 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.

1008.1.9.9.2 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 all individuals, even those individuals that are considered as unauthorized. Manually activated release mechanisms shall be made available. For specific provisions and exceptions, see Section 1008.1.9.9.4.

3. For emergency situations, buildings shall be provided with an automatic release mechanism as specified in Section 1008.1.9.9.5.

4. Once released, the door shall swing freely as a push/pull door. For specific provisions and exceptions, see Section 1008.1.9.9.6.

5. Request to exit buttons, break glass boxes and emergency pull boxes, with their required signs, shall be installed in accordance with Sections 1008.1.9.9.4 and 1008.1.9.9.7.

6. All devices used in a fire rated/fire door situation shall be approved for such use.

1008.1.9.9.3 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 1008.1.9.7 will not require separate permits. Electronic security devices shall be approved by the *building official* and shall be functionally tested by the fire marshal.

1008.1.9.9.4 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 1008.1.9.9.7.

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 1008.1.10, 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 1008.1.9.9.7 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.

1008.1.9.9.5 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 1008.1.9.9.4 and as further specified in Section 1008.1.9.9.7.

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

1008.1.9.9.5.1 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.)

1008.1.9.9.6 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.

1008.1.9.9.7 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.

~~[the *means of egress* in buildings with an occupancy in Group A, B, E, M, R-1 or R-2, and doors to tenant spaces in Group A, B, E, M, R-1 or R-2, shall be permitted to be electromagnetically locked if equipped with listed hardware that incorporates a built-in switch and meet the requirements below:~~

~~1. The listed hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.~~

~~2. The listed hardware is capable of being operated with one hand.~~

~~3. Operation of the listed hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.~~

~~4. Loss of power to the listed hardware automatically unlocks the door.~~

~~5. Where panic or *fire exit hardware* is required by Section 1008.1.10, operation of the listed panic or *fire exit hardware* also releases the electromagnetic lock.~~]

1008.1.9.10 Locking arrangements in correctional facilities. In occupancies in Groups A-2, A-3, A-4, B, E, F, I-2, I-3, M and S within correctional and detention facilities, doors in *means of egress* serving rooms or spaces occupied by persons whose movements are controlled for security reasons shall be permitted to be locked when equipped with egress control devices which shall unlock manually and by at least one of the following reasons:

1. Activation of an *automatic sprinkler system* installed in accordance with Section 903.3.1.1;

2. Activation of an *approved* manual alarm box; or

3. A signal from a *constantly attended location.*

1008.1.9.11 Stairway doors. Interior *stairway means of egress* doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. *Stairway* discharge doors shall be openable from the egress side and shall only be locked from the opposite side.

2. This section shall not apply to doors arranged in accordance with Section 403.5.3.

3. In *stairways* serving other than a high-rise building [~~not more than four stories~~], doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the fire command center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building.

4. *Stairway exit* doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single *exit stair* where permitted in Section 1021.2.

5. *Stairway exit* doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single *exit stair* where permitted in Section 1021.2."

81. Paragraph 1009.7.2, "Riser Height and Tread Depth," of Subsection 1009.7, "Stair Treads and Risers," of Section 1009, "Stairways," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1009.7.2 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. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads 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*.

Exceptions:

1. *Alternating tread devices* in accordance with Section 1009.13.

2. Ship ladders in accordance with Section 1009.14.

3. *Spiral stairways* in accordance with Section 1009.12.

4. *Aisle stairs* in assembly seating areas where the stair pitch or slope is set, for sightline reasons, by the slope of the adjacent seating area in accordance with Section 1028.11.2.

5. 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 7¾ inches (197 mm); the minimum tread depth shall be 10 inches (254 mm); and 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 ¾ inch (19.1 mm) but not more than 1¼ inches (32 mm) shall be provided on *stairways* with solid risers where the tread depth is less than 11 inches (279 mm).

6. See Section 3404.1 for the replacement of existing *stairways*.

7. In Group I-3 facilities, *stairways* providing access to guard towers, observation stations and control rooms, not more than 250 square feet (23 m^2) 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).

8. 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."

82. Subsection 1009.11, "Curved Stairways," of Section 1009, "Stairways," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1009.11 Curved stairways.** Curved *stairways* with *winder* treads shall have treads and risers in accordance with Section 1009.7 and the smallest radius shall not be less than twice the required width of the *stairway*.

Exceptions:

1. The radius restriction shall not apply to curved *stairways* for occupancies in Group R-3 and within individual *dwelling units* in occupancies 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."

83. Subsection 1010.1, "Scope," of Section 1010, "Ramps," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1010.1 Scope.** The provisions of this section shall apply to *ramps* used as a component of a *means of egress*.

Exceptions:

1. Other than *ramps* that are part of the *accessible routes* providing access in accordance with Sections 1108.2 through 1108.2.4 and 1108.2.6, ramped *aisles* within assembly rooms or spaces shall conform with the provisions in Section 1028.11.

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 1010.4 through 1010.10 when they are not an *accessible route* serving *accessible* parking spaces, other required *accessible* elements or part of an *accessible means of egress*."

84. Subsection 1011.5, "Internally Illuminated Exit Signs," of Section 1011, "Exit Signs," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1011.5 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."

85. Subsection 1014.2, "Egress Through Intervening Spaces," of Section 1014, "Exit Access," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1014.2 Egress through intervening spaces.** Egress through intervening spaces shall comply with this section.

1. 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 when the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

2. An *exit access* shall not pass through a room that can be locked to prevent egress.

3. *Means of egress* from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.

4. 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 when 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; and

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.

1014.2.1 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 lager 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."

86. Table 1014.3, "Common Path of Egress Travel," of Subsection 1014.3, "Common Path of Egress Travel," of Section 1014, "Exit Access," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"TABLE 1014.3
COMMON PATH OF EGRESS TRAVEL[g]

OCCUPANCY	WITH SPRINKLER SYSTEM (feet)		WITH SPRINKLER SYSTEM (feet)
	Occupant Load		
	≤30	>30	
B, S[d]	100	75	100[a]
U	100	75	75[a]
F	75	75	100[a]
H-1, H-2, H-3	Not Permitted	Not Permitted	25[a]
R-2	75	75	125[b]
R-3[e]	75	75	125[b]
I-3	100	100	100[a]
All others[c, f]	75	75	75[a]

For SI: 1 foot = 304.8 mm.

a. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

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. For a room or space used for assembly purposes having *fixed seating*, see Section 1028.8.
d. The length of a *common path of egress travel* in a Group S-2 *open parking garage* shall not be more than 100 feet (30,480 mm).
e. The length of a *common path of egress travel* in a Group R-3 occupancy located in a mixed occupancy building.
f. For the distance limitations in Group I-2, see Section 407.4.
g. Not applicable to single-family or duplex uses."

87. Paragraph 1015.2.1, "Two Exits or Exit Access Doorways," of Subsection 1015.2, "Exit or Exit Access Doorway Arrangement," of Section 1015, "Exit and Exit Access Doorways," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1015.2.1 Two exits or exit access doorways.** Where two *exits* or *exit access doorways* are required from any portion of the *exit access*, the *exit* doors or *exit access doorways* 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 *exit* doors or *exit access doorways*. Interlocking or *scissor stairs* shall be counted as one *exit stairway*.

Exceptions:

1. Where *interior exit stairways* are interconnected by a 1-hour fire-resistance-rated *corridor* conforming to the requirements of Section 1018, 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 of the *exit* doors or *exit access doorways* shall not be less than one-fourth [~~third~~] of the length of the maximum overall diagonal dimension of the area served.

3. Interlocking *stairs* 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 1015.2;

   3.3. The building is equipped throughout with an *automatic sprinkler system* in accordance with the Section 903.3.1.1 or 903.3.1.2, as applicable;

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; and

3.5. Each *exit* meets all of the requirements including pressurized *stairs* in Section 1022, except as otherwise noted in this exception."

88. Section 1015, "Exit and Exit Access Doorways," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended by adding a new Subsection 1015.7, "Electrical Rooms," to read as follows:

"**1015.7 Electrical rooms.** Special exiting requirements may apply for electrical rooms. See Article 110.26(c) of the *Dallas Electrical Code*."

89. Table 1016.2, "Exit Access Travel Distance," of Subsection 1016.2, "Limitations," of Section 1016, "Exit Access Travel Distance," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**TABLE 1016.2**
EXIT ACCESS TRAVEL DISTANCE[a]

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

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 404.9: For the distance limitation through an *atrium* space.
Section 407.4: For the distance limitation in Group I-2.
Section 408.6.1 and 408.8.1: For the distance limitation in Group I-3.
Section 411.4: For the distance limitation in special amusement buildings.
Section 1015.4: For the distance limitation in refrigeration machinery rooms.
Section 1015.5: For the distance limitation in refrigerated rooms and spaces.
Section 1021.2: For buildings with one *exit*.
Section 1028.7: For increased limitation in assembly seating.
Section 1028.7: For increase limitation for assembly open-air 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."

90. Subsection 1016.2, "Limitations," of Section 1016, "Exit Access Travel Distance," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended by adding a new Paragraph 1016.2.2, "Group F-1 and S-1 Increase," to read as follows:

"**1016.2.2 Group F-1 and S-1 increase.** The maximum *exit* access travel distance is 400 feet (122 m) in Group F-1 or S-1 occupancies where all of the following are met:

1. The portion of the building classified as Group F-1 or S-1 is limited to one story in height.

2. The minimum height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet (7315 mm).

3. The building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

4. The building complies with Chapter 32, "High-Piled Combustible Storage," of the *Dallas Fire Code*."

91. Subsection 1018.1, "Construction," of Section 1018, "Corridors," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1018.1 Construction.** *Corridors* shall be fire-resistance rated in accordance with Table 1018.1(1). The *corridor* walls required to be fire-resistance rated shall comply with Section 708 for *fire partitions*.

Exceptions:

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 at least on door opening directly to the exterior and rooms for assembly purposes have at least 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 or sleeping unit in an occupancy in Group R.

3. A *fire-resistance rating* is not required for *corridors* in *open parking garages*.

4. A *fire-resistance rating* not required for *corridors* in an occupancy in Group B which is a space requiring only a single *means of egress* complying with Section 1015.1.

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 602 and unprotected openings are permitted by Table 705.8.

6. *Corridor* walls and ceilings need not be of fire-resistive construction within the applicable single tenant space as listed in Table 1018.1(2) when the space is equipped with an approved automatic smoke-detection system within the *corridor*. The actuation of any detector must activate self-annunciating alarms audible in all areas served by the *corridor*. The smoke detection system must be connected to an approved automatic fire alarm system where such a system is provided."

92. Table 1018.1, "Corridor Fire-Resistance Rating," of Subsection 1018.1, "Construction," of Section 1018, "Corridors," of Chapter 10, "Means of Egress," of the 2012 International Building Code is renumbered as Table 1018.1(1) and amended to read as follows:

"TABLE 1018.1(1)
CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system[c]
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
R[d]	Greater than 10	Not Permitted	0.5
I-2[a], I-4	All	Not Permitted	0
I-1, I-3	All	Not Permitted	1[b]

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. 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."

93. Subsection 1018.1, "Construction," of Section 1018, "Corridors," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended by adding a new Table 1018.1(2), "Corridor Fire-Resistance Rating of Single Tenant Space," to read as follows:

"TABLE 1018.1(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.	1	1

	• 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 *Dallas Fire Code* and are sufficient to pose a threat to the public if released.		
III[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 for Risk Category III structures. • Buildings and other structures containing quantities of highly toxic materials that exceed maximum allowable quantities per control area in	1	1

	accordance with the *Dallas Fire Code* and are sufficient to pose a threat to the public if released. • 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."

94. Subsection 1018.4, "Dead Ends," of Section 1018, "Corridors," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1018.4 Dead ends.** Where more than one *exit* or *exit access doorway* is required, the *exit access* shall be arranged such that there are no dead ends in *corridors* more than 20 feet (6096 mm) in length.

Exceptions:

1. In occupancies in Group I-3 of Occupancy Condition 2, 3 or 4 (see Section 308.5), the dead end in a *corridor* shall not exceed 50 feet (15,240 mm).

2. In occupancies in Groups B, E, F, I-1, M, R-1, R-2, R-4, S and U, where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, the length of the dead-end *corridors* shall not exceed 50 feet (15,240 mm).

3. A dead-end *corridor* shall not be limited in length where the length of the dead-end *corridor* is less than 2.5 times the least width of the dead-end *corridor*.

4. In a Group I, Division 2 occupancy building used as a hospital or nursing home and equipped throughout with an *approved automatic sprinkler system*, the maximum dead end distance may not exceed 30 feet (9144 mm)."

95. Subsection 1026.6, "Exterior Stairway and Ramp Protection," of Section 1026, "Exterior Exit Stairways and Ramps," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1026.6 Exterior stairway and ramp protection.** *Exterior exit stairways* and *ramps* shall be separated from the interior of the building as required in Section 1022.2. Openings shall be limited to those necessary for egress from normally occupied spaces.

Exceptions:

1. Separation from the interior of the building is not required for occupancies, other than those in Group R-1 or R-2, in building that are not more than two stories above *grade plane* where a *level of exit discharge* serving such occupancies is the first story above *grade plane.*

2. Separation from the interior of the building is not required where the *exterior stairway* or *ramp* is served by an exterior *ramp* or balcony that connects two remote *exterior stairways* or other *approved exits* with a perimeter that is not less than 50 percent open. To be considered open, the opening shall be a minimum of 50 percent of the height of the enclosing wall, with the top of the openings no less than 7 feet (2134 mm) above the top of the balcony.

3. Separation from the open-ended *corridors* [~~interior~~] of the building is not required for an *exterior stairway* or *ramp* located in a building or structure that is permitted to have unenclosed *exit access stairways* in accordance with Section 1009.3.

4. Separation from the interior of the building is not required for *exterior stairways* or *ramps* connected to open-ended *corridors*, provided that Items 4.1 through 4.5 are met:

   4.1. The building, including *corridors*, *stairways* or *ramps*, shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.

   4.2. The open-ended *corridors* comply with Section 1018.

   4.3. The open-ended *corridors* are connected on each end to an *exterior exit stairway* or *ramp* complying with Section 1026.

   4.4. The *exterior walls* and openings adjacent to the *exterior exit stairway* or *ramp* comply with Section 1022.7.

4.5. At any location in an open-ended *corridor* where a change of direction exceeding 45 degrees (0.79 rad) occurs, a clear opening of not less than 35 square feet (3.3 m^2) or an *exterior stairway* or *ramp* shall be provided. Where clear openings are provided, they shall be located so as to minimize the accumulation of smoke or toxic gases."

96. Subparagraph 1028.1.1.1, "Spaces Under Grandstands and Bleachers," of Paragraph 1028.1.1, "Bleachers," of Subsection 1028.1, "General," of Section 1028, "Assembly," of Chapter 10, "Means of Egress," of the 2012 International Building Code is deleted.

97. Subsection 1029.1, "General," of Section 1029, "Emergency Escape and Rescue," of Chapter 10, "Means of Egress," of the 2012 International Building Code is amended to read as follows:

"**1029.1 General.** In addition to the *means of egress* required by this chapter, provisions shall be made for *emergency escape and rescue openings* in Group I-1 and R [~~R-2~~] occupancies [~~in accordance with Tables 1021.2(1) and 1021.2(2) and Group R-3 occupancies~~]. Basements and sleeping rooms below the fourth story above *grade plane* shall have at least one exterior *emergency escape and rescue opening* in accordance with the section. Where basements contain one or more sleeping rooms, *emergency escape and rescue openings* shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a *public way* or to a *yard or court* that opens to a *public way*.

Exceptions:

1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have *emergency escape and rescue openings*.

2. *Emergency escape and rescue openings* are not required from basements or sleeping rooms that have an *exit* door or *exit access* door that opens directly into a *public way* or to a *yard*, *court* or exterior exit balcony that opens to a *public way*.

3. Basements without *habitable spaces* and having no more than 200 feet (18.6 m^2) in floor area shall not be required to have *emergency escape and rescue openings*.

4. In other than Group R-3 occupancies, buildings equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2."

98. Subsection 1101.2, "Design," of Section 1101, "General," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1101.2 Design.** Buildings and facilities shall be designed and constructed to be *accessible* in accordance with this code and ICC A117.1.

Exceptions:

1. Buildings 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 to be in compliance with the requirements of this chapter.

2. *FHA Type C 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."

99. Subsection 1102.1, "Definitions," of Section 1102, "Definitions," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1102.1 Definitions.** The following terms are defined in Chapter 2:

ACCESSIBLE.

ACCESSIBLE ROUTE.

ACCESSIBLE UNIT.

CIRCULATION PATH.

COMMON USE.

DETECTABLE WARNING.

EMPLOYEE WORK AREA.

FACILITY.

INTENDED TO BE OCCUPIED AS A RESIDENCE.

MULTILEVEL ASSEMBLY SEATING.

MULTISTORY UNIT.

PUBLIC ENTRANCE.

PUBLIC-USE AREAS.

RESTRICTED ENTRANCE.

SELF-SERVICE STORAGE FACILITY.

SERVICE ENTRANCE.

SITE.

TYPE A UNIT.

TYPE B UNIT.

TYPE C UNIT, FHA.

WHEELCHAIR SPACE."

100. Paragraph 1103.2.6, "Construction Sites," of Subsection 1103.2, "General Exceptions," of Section 1103, "Scoping Requirements," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1103.2.6 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, [~~or~~] construction trailers or portable toilet units provided for use exclusively by construction personnel on a construction site are not required to be *accessible*."

101. Paragraph 1103.2.9, "Equipment Spaces," of Subsection 1103.2, "General Exceptions," of Section 1103, "Scoping Requirements," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1103.2.9 Equipment spaces.** Spaces frequented only by personnel for maintenance, repair or monitoring of equipment are not required to be *accessible*. Such spaces include, but are not limited to, elevator pits, elevator *penthouses*, mechanical, electrical or communications equipment rooms, piping or equipment catwalks, petroleum and chemical processing and distribution structures, water or sewage treatment pump rooms and stations, electric substations and transformer vaults, and highway and tunnel utility facilities."

102. Subsection 1103.2, "General Exceptions," of Section 1103, "Scoping Requirements," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended by adding a new Paragraph 1103.2.16, "Restricted Occupancy Spaces," to read as follows:

"**1103.2.16 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."

103. Subsection 1103.2, "General Exceptions," of Section 1103, "Scoping Requirements," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended by adding a new Paragraph 1103.2.17, "Places Used Primarily for Religious Rituals," to read as follows:

"**1103.2.17 Places used primarily for religious rituals.** An area within a building or facility of a religious organization used primarily for religious ritual as determined by the owner or occupant. To facilitate the plan review, the owner or occupant shall include a clear designation of such areas with the plans submitted for review. This exemption does not apply to common use areas. Examples of common use areas include, but are not limited to, the following: parking facilities, *accessible routes*, walkways, hallways, toilet facilities, entrances, public telephones, drinking fountains and *exits*."

104. Subsection 1106.1, "Required," of Section 1106, "Parking and Passenger Loading Facilities," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1106.1 Required.** Where parking is provided, *accessible* parking spaces shall be provided in compliance with Table 1106.1, except as required by Section 1106.2 through 1106.4 and as required by the *Dallas Development Code*. 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."

105. Subsection 1107.2, "Design," of Section 1107, "Dwelling Units and Sleeping Units," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1107.2 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 Type C units* are permitted to be designed and constructed as *Accessible units*, *Type A units* or *Type B units*.

1107.2.1 Alternate design. *FHA Type C 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.

1107.2.1.1 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. The Texas Accessibility Standards may be used to satisfy the requirements for public and common use areas;

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. Light switches, electrical outlets, thermostats and other environmental controls in accessible locations;

   3.3 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

   3.4 Usable kitchens and bathrooms such that an individual in a wheelchair can maneuver about the space."

106. Subsection 1107.6, "Group R," of Section 1107, "Dwelling Units and Sleeping Units," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1107.6 Group R.** *Accessible units*, *Type A units*, [~~and~~] *Type B units* and *FHA Type C units* shall be provided in Group R occupancies in accordance with Sections 1107.6.1 and 1107.6.4.

1107.6.1 Group R-1. *Accessible units* and *Type B units* shall be provided in Group R-1 occupancies in accordance with Sections 1107.6.1.1 and 1107.6.1.2.

1107.6.1.1 Accessible units. *Accessible dwelling units* and *sleeping units* shall be provided in accordance with Table 1107.6.1.1. 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. Roll-in showers provided in *Accessible units* shall include a permanently mounted folding shower seat.

1107.6.1.1.1 Accessible unit facilities. All interior and exterior spaces provided as part of or serving an *Accessible dwelling unit* or *sleeping unit* shall be *accessible* and be located on an *accessible route*.

Exceptions:

1. Where multiple bathrooms are provided within an *Accessible unit*, at least one full bathroom shall be *accessible*.

2. Where multiple-family or assisted bathrooms serve an *Accessible unit*, at least 50 percent but not less than one room for each use at each cluster shall be *accessible*.

3. Five percent, but not less than one bed shall be *accessible*.

1107.6.1.2 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 1107.7.

1107.6.2 Group R-2. *Accessible units*, *Type A units*, [~~and~~] *Type B units* and *FHA Type C units* shall be provided in Group R-2 occupancies in accordance with Sections 1107.6.2.1 and 1107.6.2.2. Fire walls are not considered in the determination of the number of dwelling units in a structure for *Type B* or *FHA Type C units*.

1107.6.2.1 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 1107.6.2.1.1 and 1107.6.2.1.2 or *FHA Type C units* must be provided in accordance with Section 1107.6.2.1.3.

1107.6.2.1.1 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 units and the required number of *Type A units*. *Type A units* shall be dispersed among the various classes of units.

Exceptions:

1. The number of *Type A units* is permitted to be reduced in accordance with Section 1107.7.

2. *Existing structures* on a *site* shall not contribute to the total number of units on a *site*.

1107.6.2.1.2 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 1107.7.

1107.6.2.1.3 FHA Type C 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* or *sleeping unit intended to be occupied as a residence* shall be an *FHA Type C unit.*

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

1107.6.2.2 Group R-2 other than apartment houses, monasteries and convents. In Group R-2 occupancies, other than apartment houses, monasteries and convents, *Accessible units* and *Type B units* shall be provided in accordance with Sections 1107.6.2.2.1 and 1107.6.2.2.2 or *FHA Type C units* shall be provided in accordance with Section 1107.6.2.2.3.

1107.6.2.2.1 Accessible units. *Accessible dwelling units* and *sleeping units* shall be provided in accordance with Table 1107.6.1.1.

1107.6.2.2.2 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 *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 1107.7.

1107.6.2.2.3 FHA Type C 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 an *FHA Type C unit.*

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

1107.6.3 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 Type C unit*.

Exceptions:

1. The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

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

1107.6.4 Group R-4. *Accessible units* and *Type B units* shall be provided in Group R-4 occupancies in accordance with Sections 1107.6.4.1 and 1107.6.4.2 or *FHA Type C units* shall be provided in accordance with Section 1107.6.4.3.

1107.6.4.1. Accessible units. At least one of the *dwelling units* or *sleeping units* shall be an *Accessible unit.*

1107.6.4.2 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 1107.7.

1107.6.4.3 FHA Type C 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 an *FHA Type C unit.*

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

107. Subsection 1109.1, "General," of Section 1109, "Other Features and Facilities," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1109.1 General.** *Accessible* building features and facilities shall be provided in accordance with Sections 1109.2 through 1109.15.

Exceptions:

1. *Accessible units*, *Type A units* and *Type B units* shall comply with Chapter 10 of ICC A117.1.

2. *FHA Type C dwelling units* designed and constructed in accordance with the *Fair Housing Act Design Manual*—1996 (Updated 1998) are considered in compliance with these provisions."

108. Paragraph 1109.2.1, "Family or Assisted-Use Toilet and Bathing Rooms," of Subsection 1109.2, "Toilet and Bathing Facilities," of Section 1109, "Other Features and Facilities," of Chapter 11, "Accessibility," of the 2012 International Building Code is amended to read as follows:

"**1109.2.1 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."

109. Paragraph 1210.2.2, "Walls and Partitions," of Subsection 1210.2, "Finish Materials," of Section 1210, "Toilet and Bathroom Requirements," of Chapter 12, "Interior Environment," of the 2012 International Building Code is amended to read as follows:

"**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 unit and sleeping units.

2. Toilet rooms that are not accessible to the public and which 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."

110. Subsection 1405.5, "Wood Veneers," of Section 1405, "Installation of Wall Coverings," of Chapter 14, "Exterior Walls," of the 2012 International Building Code is amended to read as follows:

"**1405.5 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 Section 1406.2.1 and 1406.3 for additional limitations."

111. Subparagraph 1406.2.1.1, "Ignition Resistance," of Paragraph 1406.2.1, "Type I, II, III and IV Construction," of Subsection 1406.2, "Combustible Exterior Wall Coverings," of Section 1406, "Combustible Materials on the Exterior Side of Exterior Walls," of Chapter 14, "Exterior Walls," of the 2012 International Building Code is amended to read as follows:

"**1406.2.1.1 Ignition resistance.** Where permitted by Section 1406.2.1, combustible exterior wall coverings shall be tested in accordance with NFPA 268.

Exceptions:

1. Wood or wood-based products installed at fully sprinklered exterior exitways, exterior *stairs* or exterior *exit* balconies of Group R occupancies.

2. Other combustible materials covered with an exterior covering other than vinyl sidings listed in Table 1405.2.

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 wood-based 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.

1406.2.1.1.1 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.

1406.2.1.1.2 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 1406.2.1.1.2 based on the maximum tolerable level of incident radiant heat flux that does not cause sustained flaming of the exterior wall covering."

112. Subsection 1406.3, "Balconies and Similar Projections," of Section 1406, "Combustible Materials on the Exterior Side of Exterior Walls," of Chapter 14, "Exterior Walls," of the 2012 International Building Code is amended to read as follows:

"**1406.3 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 Type IV construction in accordance with Section 602.4. The aggregate length of the projections shall not exceed 50 percent of the building's perimeter on each floor.

Exceptions:

1. On buildings of Type 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 is permitted for pickets and rails or similar guardrail devices that are limited to 42 inches (1067 mm) in height installed at fully sprinklered exterior exitways, exterior *stairs* or exterior exit balconies of Group R occupancies.

3. Balconies and similar projections on buildings of Type 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."

113. Table 1505.1, "Minimum Roof Covering Classification for Types of Construction," of Subsection 1505.1, "General," of Section 1505, "Fire Classification," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2012 International Building Code is amended to read as follows:

"**TABLE 1505.1[a][, b]**
MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
B	B	B	C[b][e]	B	C[c]	B	B	C[b][e]

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 having not 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 coverings.

[~~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 the 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.~~]"

114. Subsection 1505.7, "Special Purpose Roofs," of Section 1505, "Fire Classification," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2012 International Building Code is deleted.

115. Paragraph 1509.2.5, "Type of Construction," of Subsection 1509.2, "Penthouses," of Section 1509, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2012 International Building Code is amended to read as follows:

"**1509.2.5 Type of construction.** Penthouses shall be constructed with walls, floors and roofs 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.

Exceptions:

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 602 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 602. 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 Type IV or noncombustible construction or fire-retardant-treated wood and shall not be required to have a fire-resistance rating."

116. Subsection 1509.8, "Other Rooftop Structures," of Section 1509, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2012 International Building Code is amended by adding a new Paragraph 1509.8.6, "Architectural Appendages," to read as follows:

"**1509.8.6 Architectural appendages.** Architectural appendages used exclusively as decorative or embellishment must comply with Section 1509.2 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."

117. Section 1509, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2012 International Building Code is amended by adding a new Subsection 1509.9, "Wood Surfaces," to read as follows:

"**1509.9 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."

118. Subsection 1510.1, "General," of Section 1510, "Reroofing," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2012 International Building Code is amended to read as follows:

"**1510.1 General.** Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15. All individual replacement shingles or shakes must comply with the rating required by Table 1505.1.

Exception: Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage.

1510.1.1 Inspections. New roof coverings must not be applied without first obtaining a permit from the *building official*, unless the work is exempted by Chapter 52, the "Administrative Procedures for the Construction Codes." An application for a permit to reroof must include a list of sites to be used for the disposal of reroofing debris. A final inspection and approval must be obtained from the *building official* when the reroofing is complete. No final inspection may be performed or approval of work given until proof is submitted to the *building official* that all debris from the reroofing was disposed of at a city of Dallas landfill or transfer station."

119. Subsection 1510.3, "Recovering Versus Replacement," of Section 1510, "Reroofing," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2012 International Building Code is amended to read as follows:

"**1510.3 Recovering versus replacement.** New roof coverings shall not be installed without first removing all existing layers of roof coverings down to the roof deck 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 wood shake, slate, clay, cement or asbestos-cement tile.

3. Where the existing roof has two or more applications of any type of roof covering.

Exceptions:

1. Complete and separate roofing systems, such as standing-seam metal roof 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 removal of existing roof coverings.

2. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied as follows. Where the application of a new roof covering over wood shake roofs creates a combustible concealed space, the entire existing surface must be covered with gypsum board, mineral fiber, glass fiber or other approved materials securely fastened in place [~~accordance with Section 1510.4~~].

3. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tear-off of existing roof coverings.

4. Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 1507."

120. Subsection 1510.4, "Roof Recovering," of Section 1510, "Reroofing," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2012 International Building Code is amended to read as follows:

"**1510.4 Roof recovering.** Where the application of a new roof covering over wood shingle [~~or shake~~] roofs creates a combustible concealed space, the entire existing surface shall be covered with gypsum board, mineral fiber, glass fiber or other *approved* materials securely fastened in place."

121. Subsection 1612.1, "General," of Section 1612, "Flood Loads," of Chapter 16, "Structural Design," of the 2012 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*."

122. Subsection 1704.2, "Special Inspections," of Section 1704, "Special Inspections, Contractor Responsibility and Structural Observations," of Chapter 17, "Special Inspections and Tests," of the 2012 International Building Code is amended to read as follows:

"**1704.2 Special inspections.** Where application is made for construction as described in this section, the owner or the *registered design professional in responsible charge* acting as the owner's agent shall employ one or more *approved agencies* to perform inspections during construction on the types of work listed in Section 1705. These inspections are in addition to the inspections identified in Section 304 of Chapter 52, "Administrative Provisions for the Construction Codes" of the *Dallas City Code* [~~110~~].

Exceptions:

1. *Special inspections* 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* 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 are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.7 or the conventional light-frame construction provisions of Section 2308.

1704.2.1 Special inspector qualifications. The special inspector shall provide written documentation to the building official demonstrating his or her competence and relevant experience or training. Experience or training shall be considered relevant when the documented experience or training is related in complexity to the same type of *special inspection* activities for projects of similar complexity and material qualities. These qualifications are in addition to the qualification 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 at the special inspector 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 is required shall remain accessible and exposed for special inspection purposes until completion of the required special inspections.

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 cold-formed steel light frame construction provisions of Section 2211.7 or the conventional light-frame construction provisions of Section 2308.

1704.2.4 Report requirement. Special inspectors shall keep records of inspections. The special inspector shall furnish inspection reports to the *building official*, and to the *registered design professional in responsible charge*. Reports shall indicate that work inspected 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 completion of that phase of the work. A final report documenting required *special inspections* and correction of any discrepancies noted in the inspections shall be submitted at a point in time agreed upon prior to the start of work by the applicant and the *building official*.

1704.2.5 Inspection of fabricators. Where fabrication of structural load-bearing members and assemblies is being performed on the premises of a fabricator's shop, *special inspection* of the fabricated items shall be required by this section and as required elsewhere in this code.

1704.2.5.1 Fabrication and implementation procedures. The special inspector shall verify that the fabricator maintains detailed fabrication and quality control procedures that provide a basis for inspection control of the workmanship and the fabricator's ability to conform to *approved construction documents* and referenced standards. The special inspector shall review the procedures for completeness and adequacy relative to the code requirements for the fabricator's scope of work.

Exception: *Special inspections* as required by Section 1704.2.5 shall not be required where the fabricator is *approved* in accordance with Section 1704.2.5.2.

1704.2.5.2 Fabricator approval. *Special inspections* required by Section 1705 are not required where the work is done on the premises of a fabricator registered and *approved* to perform such work without *special inspection*. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an *approved special inspection* agency. At completion of fabrication, the *approved* fabricator shall submit a *certificate of compliance* to the *building official* stating that the work was performed in accordance with the *approved construction documents*."

123. Section 1705, "Required Verification and Inspection," of Chapter 17, "Special Inspections and Tests," of the 2012 International Building Code is amended by adding a new Subsection 1705.18, "Special Inspections for Dallas Energy Code Compliance," to read as follows:

"**1705.18 Special inspections for Dallas Energy Code compliance.** *Special inspections* are required to verify compliance with the *Dallas Energy Code* in accordance with Section 1705.18.1 and 1705.18.2.

1705.18.1 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.

1705.18.2 Qualifications. Special inspectors for *Dallas Energy Code* inspections shall have a current International Code Council certification in the relevant energy code inspection specialty."

124. Section 1705, "Required Verification and Inspection," of Chapter 17, "Special Inspections and Tests," of the 2012 International Building Code is amended by adding a new Subsection 1705.19, "Special Inspections for Dallas Green Construction Code Compliance," to read as follows:

"**1705.19 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 1705.19.1 and 1705.19.2.

1705.19.1 Scope of inspection and testing.

1705.19.1.1 Single-family or duplex structures. The scope of work required is stipulated in the *Dallas Green Construction Code.*

1705.19.1.2 Commercial structures. The scope of work required is stipulated in the *Dallas Green Construction Code.*

1705.19.2 Qualifications. Special inspectors for *Dallas Green Construction Code* inspections shall be qualified as stipulated in the *Dallas Green Construction Code.*"

125. Table 2308.8(1), "Floor Joist Spans for Common Lumber Species," of Subsection 2308.8, "Floor Joists," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

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TABLE 2308.8(1)
FLOOR JOIST SPANS FOR COMMON LUMBER SPECIES
(Residential Sleeping Areas, Live Load = 30 psf, L/Δ = 360)

JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 psf				DEAD LOAD = 20 psf			
			2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
			Maximum floor joist spans							
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	12-6	16-6	21-0	25-7	12-6	16-6	21-0	25-7
	Douglas Fir-Larch	#1	12-0	15-10	20-3	24-8	12-0	15-7	19-0	22-0
	Douglas Fir-Larch	#2	11-10	15-7	19-10	23-0	11-6	14-7	17-9	20-7
	Douglas Fir-Larch	#3	9-8	12-4	15-0	17-5	8-8	11-0	13-5	15-7
	Hem-Fir	SS	11-10	15-7	19-10	24-2	11-10	15-7	19-10	24-2
	Hem-Fir	#1	11-7	15-3	19-5	23-7	11-7	15-2	18-6	21-6
	Hem-Fir	#2	11-0	14-6	18-6	22-6	11-0	14-4	17-6	20-4
	Hem-Fir	#3	9-8	12-4	15-0	17-5	8-8	11-0	13-5	15-7
	Southern Pine	SS	12-3	16-2	20-8	25-1	12-3	16-2	20-8	25-1
	Southern Pine	#1	12-0 11-10	15-10 15-7	20-3 19-10	24-8 24-2	12-0 11-10	15-10 15-7	20-3 18-7	24-8 22-0
	Southern Pine	#2	11-10 11-3	15-7 14-11	19-10 18-1	24-2 21-4	11-10 10-9	15-7 13-8	18-7 16-2	21-9 19-1
	Southern Pine	#3	10-3 9-2	13-3 11-6	15-8 14-0	18-8 16-6	9-1 8-2	11-11 10-3	14-0 12-6	16-8 14-9
	Spruce-Pine-Fir	SS	11-7	15-3	19-5	23-7	11-7	15-3	19-5	23-7
	Spruce-Pine-Fir	#1	11-3	14-11	19-0	23-0	11-3	14-7	17-9	20-7
	Spruce-Pine-Fir	#2	11-3	14-11	19-0	23-0	11-3	14-7	17-9	20-7
	Spruce-Pine-Fir	#3	9-8	12-4	15-0	17-5	8-8	11-0	13-5	15-7
16	Douglas Fir-Larch	SS	11-4	15-0	19-1	23-3	11-4	15-0	19-1	23-0
	Douglas Fir-Larch	#1	10-11	14-5	18-5	21-4	10-8	13-6	16-5	19-1
	Douglas Fir-Larch	#2	10-9	14-1	17-2	19-11	9-11	12-7	15-5	17-10
	Douglas Fir-Larch	#3	8-5	10-8	13-0	15-1	7-6	9-6	11-8	13-6
	Hem-Fir	SS	10-9	14-2	18-0	21-11	10-9	14-2	18-0	21-11
	Hem-Fir	#1	10-6	13-10	17-8	20-9	10-4	13-4	16-0	18-7
	Hem-Fir	#2	10-0	13-2	16-10	19-8	9-10	12-5	15-2	17-7
	Hem-Fir	#3	8-5	10-8	13-0	15-1	7-6	9-6	11-8	13-6
	Southern Pine	SS	11-2	14-8	18-9	22-10	11-2	14-8	18-9	22-10
	Southern Pine	#1	10-11 10-9	14-5 11-2	18-5 18-0	23-4 21-4	10-11 10-9	14-5 13-9	17-11 16-1	21-4 19-1
	Southern Pine	#2	10-9 10-3	14-2 13-3	18-0 15-8	21-1 18-6	10-5 9-4	12-6 11-10	16-4 14-0	18-10 16-6
	Southern Pine	#3	9-0 7-11	11-6 10-0	13-7 12-1	16-2 14-4	8-1 7-1	10-7 8-11	13-2 10-10	14-6 12-10
	Spruce-Pine-Fir	SS	10-6	13-10	17-8	21-6	10-6	13-10	17-8	21-4
	Spruce-Pine-Fir	#1	10-3	13-6	17-2	19-11	9-11	12-7	15-5	17-10
	Spruce-Pine-Fir	#2	10-3	13-6	17-2	19-11	9-11	12-7	15-5	17-10
	Spruce-Pine-Fir	#3	8-5	10-8	13-0	15-1	7-6	9-6	11-8	13-6
19.2	Douglas Fir-Larch	SS	10-8	14-1	18-0	21-10	10-8	14-1	18-0	21-9
	Douglas Fir-Larch	#1	10-4	13-7	16-9	19-6	9-8	12-4	15-0	17-5
	Douglas Fir-Larch	#2	10-1	12-10	15-8	18-3	9-1	11-6	14-1	16-3
	Douglas Fir-Larch	#3	7-8	9-9	11-10	13-9	6-10	8-8	10-7	12-4
	Hem-Fir	SS	10-1	13-4	17-0	20-8	10-1	13-4	17-0	20-7
	Hem-Fir	#1	9-10	13-0	16-4	19-0	9-6	12-0	14-8	17-0
	Hem-Fir	#2	9-5	12-5	15-6	17-11	8-11	11-4	13-10	16-1
	Hem-Fir	#3	7-8	9-9	11-10	13-9	6-10	8-8	10-7	12-4

(continued)

TABLE 2308.8(1)—continued
FLOOR JOIST SPANS FOR COMMON LUMBER SPECIES
(Residential Sleeping Areas, Live Load = 30 psf, L/Δ = 360)

JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 psf				DEAD LOAD = 20 psf			
			2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
			Maximum floor joist spans							
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Southern Pine	SS	10-6	13-10	17-8	21-6	10-6	13-10	17-8	21-6
	Southern Pine	#1	~~10-4~~ 10-1	~~13-7~~ 13-4	~~17-4~~ 16-5	~~21-1~~ 19-6	~~10-4~~ 9-11	~~13-7~~ 12-7	~~16-4~~ 14-8	~~19-6~~ 17-5
	Southern Pine	#2	~~10-1~~ 9-6	~~13-4~~ 12-1	~~16-5~~ 14-4	~~19-3~~ 16-10	~~9-6~~ 8-6	~~12-4~~ 10-10	~~14-8~~ 12-10	~~17-2~~ 15-1
	Southern Pine	#3	~~8-3~~ 7-3	~~10-6~~ 9-1	~~12-5~~ 11-0	~~14-9~~ 13-1	~~7-1~~ 6-5	~~9-5~~ 8-2	~~11-1~~ 9-10	~~13-2~~ 11-8
	Spruce-Pine-Fir	SS	9-10	13-0	16-7	20-2	9-10	13-0	16-7	19-6
	Spruce-Pine-Fir	#1	9-8	12-9	15-8	18-3	9-1	11-6	14-1	16-3
	Spruce-Pine-Fir	#2	9-8	12-9	15-8	18-3	9-1	11-6	14-1	16-3
	Spruce-Pine-Fir	#3	7-8	9-9	11-10	13-9	6-10	8-8	10-7	12-4
24	Douglas Fir-Larch	SS	9-11	13-1	16-8	20-3	9-11	13-1	16-2	18-9
	Douglas Fir-Larch	#1	9-7	12-4	15-0	17-5	8-8	11-0	13-5	15-7
	Douglas Fir-Larch	#2	9-1	11-6	14-1	16-3	8-1	10-3	12-7	14-7
	Douglas Fir-Larch	#3	6-10	8-8	10-7	12-4	6-2	7-9	9-6	11-0
	Hem-Fir	SS	9-4	12-4	15-9	19-2	9-4	12-4	15-9	18-5
	Hem-Fir	#1	9-2	12-0	14-8	17-0	8-6	10-9	13-1	15-2
	Hem-Fir	#2	8-9	11-4	13-10	16-1	8-0	10-2	12-5	14-4
	Hem-Fir	#3	6-10	8-8	10-7	12-4	6-2	7-9	9-6	11-0
	Southern Pine	SS	9-9	12-10	16-5	19-11	9-9	12-10	16-5	~~19-11~~ 19-8
	Southern Pine	#1	~~9-7~~ 9-4	~~12-7~~ 12-4	~~16-1~~ 14-8	~~19-6~~ 17-5	~~9-7~~ 8-10	~~12-4~~ 11-3	~~14-7~~ 13-1	~~17-5~~ 15-7
	Southern Pine	#2	~~9-4~~ 8-6	~~12-4~~ 10-10	~~14-8~~ 12-10	~~17-2~~ 15-1	~~8-6~~ 7-7	~~11-0~~ 9-8	~~13-1~~ 11-5	~~15-5~~ 13-6
	Southern Pine	#3	~~7-4~~ 6-5	~~9-3~~ 8-2	~~11-1~~ 9-10	~~13-2~~ 11-8	~~6-7~~ 5-9	~~8-6~~ 7-3	~~9-11~~ 8-10	~~11-10~~ 10-5
	Spruce-Pine-Fir	SS	9-2	12-1	15-5	18-9	9-2	12-1	15-0	17-5
	Spruce-Pine-Fir	#1	8-11	11-6	14-1	16-3	8-1	10-3	12-7	14-7
	Spruce-Pine-Fir	#2	8-11	11-6	14-1	16-3	8-1	10-3	12-7	14-7
	Spruce-Pine-Fir	#3	6-10	8-8	10-7	12-4	6-2	7-9	9-6	11-0

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.8 N/m².

126. Table 2308.8(2), "Floor Joist Spans for Common Lumber Species," of Subsection 2308.8, "Floor Joists," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.8(2)
FLOOR JOIST SPANS FOR COMMON LUMBER SPECIES
(Residential Living Areas, Live Load = 40 psf, L/Δ = 360)

JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 psf				DEAD LOAD = 20 psf			
			2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
			Maximum floor joist spans							
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	11-4	15-0	19-1	23-3	11-4	15-0	19-1	23-3
	Douglas Fir-Larch	#1	10-11	14-5	18-4	22-0	10-11	14-2	17-4	20-1
	Douglas Fir-Larch	#2	10-9	14-2	17-9	20-7	10-6	13-8	16-3	18-10
	Douglas Fir-Larch	#3	8-8	11-6	13-5	15-7	7-11	10-0	12-3	14-3
	Hem-Fir	SS	10-9	14-2	18-0	21-11	10-9	14-2	18-0	21-11
	Hem-Fir	#1	10-6	13-10	17-8	21-6	10-6	13-10	16-11	19-7
	Hem-Fir	#2	10-0	13-2	16-10	20-4	10-0	13-1	16-0	18-6
	Hem-Fir	#3	8-8	11-6	13-5	15-7	7-11	10-0	12-3	14-3
	Southern Pine	SS	11-2	14-8	18-9	22-10	11-2	14-8	18-9	22-10
	Southern Pine	#1	~~10-11~~ 10-9	~~14-5~~ ~~14-2~~	~~18-4~~ 18-0	~~22-5~~ 21-11	~~10-11~~ ~~10-9~~	~~14-5~~ ~~14-2~~	~~18-4~~ 15-11	~~22-5~~ ~~20-1~~
	Southern Pine	#2	~~10-9~~ ~~10-3~~	~~14-2~~ ~~13-6~~	~~18-0~~ ~~16-2~~	~~21-11~~ ~~19-1~~	~~10-9~~ ~~9-10~~	~~14-2~~ ~~12-6~~	~~16-11~~ ~~14-9~~	~~19-10~~ ~~17-3~~
	Southern Pine	#3	~~9-4~~ ~~8-2~~	~~11-11~~ ~~10-3~~	~~14-0~~ ~~12-6~~	~~16-8~~ ~~14-9~~	~~8-6~~ ~~7-5~~	~~10-10~~ ~~9-5~~	~~12-10~~ ~~11-5~~	~~15-3~~ ~~13-6~~
	Spruce-Pine-Fir	SS	10-6	13-10	17-8	21-6	10-6	13-10	17-8	21-6
	Spruce-Pine-Fir	#1	10-3	13-6	17-1	20-7	10-3	13-3	16-3	18-10
	Spruce-Pine-Fir	#2	10-3	13-6	17-1	20-7	10-3	13-3	16-3	18-10
	Spruce-Pine-Fir	#3	8-8	11-0	12-5	15-7	7-11	10-0	12-3	14-3
16	Douglas Fir-Larch	SS	10-4	13-7	17-4	21-1	10-4	13-7	17-4	21-0
	Douglas Fir-Larch	#1	9-11	13-1	16-7	19-1	9-8	12-4	15-0	17-5
	Douglas Fir-Larch	#2	9-9	12-7	15-5	17-10	9-1	11-6	14-1	16-3
	Douglas Fir-Larch	#3	7-6	9-6	11-8	13-6	6-10	8-8	10-7	12-4
	Hem-Fir	SS	9-9	12-10	16-5	19-11	9-9	12-10	16-5	19-11
	Hem-Fir	#1	9-6	12-7	16-0	18-7	9-6	12-0	14-8	17-0
	Hem-Fir	#2	9-1	12-0	15-2	17-7	8-11	11-4	13-10	16-1
	Hem-Fir	#3	7-6	9-6	11-8	13-6	6-10	8-8	10-7	12-4
	Southern Pine	SS	10-2	~~13-4~~	17-0	20-9	10-2	13-4	17-0	20-9
	Southern Pine	#1	~~9-11~~ ~~9-9~~	~~13-1~~ ~~12-10~~	~~16-9~~ ~~16-1~~	~~20-4~~ ~~19-1~~	~~9-11~~ ~~9-8~~	~~13-1~~ ~~12-7~~	~~16-9~~ ~~14-8~~	~~19-6~~ ~~17-5~~
	Southern Pine	#2	~~9-9~~ ~~9-4~~	~~12-10~~ ~~11-10~~	~~16-1~~ ~~14-9~~	~~18-10~~ ~~16-6~~	~~9-6~~ ~~8-6~~	~~12-4~~ ~~10-10~~	~~14-8~~ ~~12-10~~	~~17-2~~ ~~15-1~~
	Southern Pine	#3	~~8-4~~ ~~7-1~~	~~10-3~~ ~~8-11~~	~~12-3~~ ~~10-10~~	~~14-6~~ ~~12-10~~	~~7-4~~ ~~6-5~~	~~9-5~~ ~~8-2~~	~~11-1~~ ~~9-10~~	~~13-3~~ ~~11-8~~
	Spruce-Pine-Fir	SS	9-6	12-7	16-0	19-6	9-6	12-7	16-0	19-6
	Spruce-Pine-Fir	#1	9-4	12-3	15-5	17-10	9-1	11-6	14-1	16-3
	Spruce-Pine-Fir	#2	9-4	12-3	15-5	17-10	9-1	11-6	14-1	16-3
	Spruce-Pine-Fir	#3	7-6	9-6	11-8	13-6	6-10	8-8	10-7	12-4
19.2	Douglas Fir-Larch	SS	9-8	12-10	16-4	19-10	9-8	12-10	16-4	19-2
	Douglas Fir-Larch	#1	9-4	12-4	15-0	17-5	8-10	11-3	13-8	15-11
	Douglas Fir-Larch	#2	9-1	11-6	14-1	16-3	8-3	10-6	12-10	14-10
	Douglas Fir-Larch	#3	6-10	8-8	10-7	12-4	6-3	7-11	9-8	11-3
	Hem-Fir	SS	9-3	12-1	15-5	18-9	9-2	12-1	15-5	18-9
	Hem-Fir	#1	9-0	11-10	14-8	17-0	8-8	10-11	13-4	15-6
	Hem-Fir	#2	8-7	11-3	13-10	16-1	8-2	10-2	12-8	14-8
	Hem-Fir	#3	6-10	8-8	10-7	12-4	6-3	7-11	9-8	11-3
	Southern Pine	SS	9-8	12-7	16-0	19-6	9-8	12-7	16-0	19-6
	Southern Pine	#1	~~9-4~~ ~~9-2~~	~~12-4~~ ~~12-1~~	~~15-9~~ ~~15-8~~	~~19-2~~ ~~17-9~~	~~9-4~~ ~~9-0~~	~~12-4~~ ~~11-5~~	~~15-9~~ ~~13-9~~	~~18-11~~ ~~15-11~~
	Southern Pine	#2	~~8-8~~ ~~8-6~~	~~11-4~~ ~~10-10~~	~~14-3~~ ~~12-10~~	~~16-7~~ ~~15-1~~	~~8-2~~ ~~7-9~~	~~10-9~~ ~~9-10~~	~~13-5~~ ~~11-8~~	~~15-8~~ ~~13-9~~
	Southern Pine	#3	~~7-4~~ ~~6-5~~	~~9-5~~ ~~8-2~~	~~11-1~~ ~~9-10~~	~~13-3~~ ~~11-8~~	~~6-6~~ ~~5-11~~	~~8-7~~ ~~7-5~~	~~10-1~~ ~~9-0~~	~~12-1~~ ~~10-8~~
	Spruce-Pine-Fir	SS	9-0	11-10	15-1	18-4	9-0	11-10	15-1	17-9
	Spruce-Pine-Fir	#1	8-9	11-6	14-1	16-3	8-3	10-6	12-10	14-10
	Spruce-Pine-Fir	#2	8-9	11-6	14-1	16-3	8-3	10-6	12-10	14-10
	Spruce-Pine-Fir	#3	6-10	8-8	10-7	12-4	6-3	7-11	9-8	11-3

(continued)

TABLE 2308.8(2)—continued
FLOOR JOIST SPANS FOR COMMON LUMBER SPECIES
(Residential Living Areas, Live Load = 40 psf, L/Δ = 360)

JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 psf				DEAD LOAD = 20 psf			
			2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
			Maximum floor joist spans							
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
24	Douglas Fir-Larch	SS	9-0	11-11	15-2	18-5	9-0	11-11	14-9	17-1
	Douglas Fir-Larch	#1	8-8	11-0	13-5	15-7	7-11	10-0	12-3	14-3
	Douglas Fir-Larch	#2	8-1	10-3	12-7	14-7	7-5	9-5	11-6	13-4
	Douglas Fir-Larch	#3	6-2	7-9	9-6	11-0	5-7	7-1	8-8	10-1
	Hem-Fir	SS	8-6	11-3	14-4	17-5	8-6	11-3	14-4	16-10[a]
	Hem-Fir	#1	8-4	10-9	13-1	15-2	7-9	9-9	11-11	13-10
	Hem-Fir	#2	7-11	10-2	12-5	14-4	7-6	9-3	11-4	13-1
	Hem-Fir	#3	6-2	7-9	9-6	11-0	5-7	7-1	8-8	10-1
	Southern Pine	SS	8-10	11-8	14-11	18-1	8-10	11-8	14-11	~~18-1~~ 18-0
	Southern Pine	#1	~~8-8~~ 8-6	~~11-5~~ 11-3	~~14-7~~ 13-1	~~17-5~~ 15-7	~~8-8~~ 8-1	~~11-3~~ 10-3	~~13-4~~ 12-0	~~15-11~~ 14-3
	Southern Pine	#2	~~8-6~~ 7-7	~~11-0~~ 9-8	~~13-7~~ 11-5	~~15-5~~ 13-6	~~7-9~~ 7-0	~~10-0~~ 8-10	~~12-0~~ 10-5	~~14-0~~ 12-4
	Southern Pine	#3	~~6-7~~ 5-9	~~8-5~~ 7-3	~~9-11~~ 8-10	~~11-10~~ 10-5	~~6-0~~ 5-3	~~7-8~~ 6-8	~~9-1~~ 8-1	~~10-9~~ 9-6
	Spruce-Pine-Fir	SS	8-4	11-0	14-0	17-0	8-4	11-0	13-8	15-11
	Spruce-Pine-Fir	#1	8-1	10-3	12-7	14-7	7-5	9-5	11-6	13-4
	Spruce-Pine-Fir	#2	8-1	10-3	12-7	14-7	7-5	9-5	11-6	13-4
	Spruce-Pine-Fir	#3	6-2	7-9	9-6	11-0	5-7	7-1	8-8	10-1

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.8 N/m^2.
a. End bearing length shall be increased to 2 inches.

127. Table 2308.9.5, "Header and Girder Spans for Exterior Bearing Walls," of Paragraph 2308.9.5, "Openings in Exterior Walls," of Subsection 2308.9, "Wall Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2306.9.5
HEADER AND GIRDER SPANS[a,b] FOR EXTERIOR BEARING WALLS
(Maximum Spans for Douglas Fir-Larch, Hem-Fir, Southern Pine and Spruce-Pine-Fir[h] and Required Number of Jack Studs)

HEADERS SUPPORTING	SIZE	GROUND SNOW LOAD (psf)[c]											
		30						50					
		Building width[d] (feet)											
		20		28		36		20		28		36	
		Span	NJ[e]	Span	NJ[e]	Span	NJ[e]	Span	NJ[e]	Span	NJ[e]	Span	NJ[e]
Roof & Ceiling	2-2x4	3-6	1	3-2	1	2-10	1	3-2	1	2-9	1	2-6	1
	2-2x6	5-5	1	4-8	1	4-2	1	4-8	1	4-1	1	3-8	2
	2-2x8	6-10	1	5-11	2	5-4	2	5-11	2	5-2	2	4-7	2
	2-2x10	8-5	2	7-3	2	6-6	2	7-3	2	6-3	2	5-7	2
	2-2x12	9-9	2	8-5	2	7-6	2	8-5	2	7-3	2	6-6	2
	3-2x8	8-4	1	7-5	1	6-8	1	7-5	1	6-5	2	5-9	2
	3-2x10	10-6	1	9-1	2	8-2	2	9-1	2	7-10	2	7-0	2
	3-2x12	12-2	2	10-7	2	9-5	2	10-7	2	9-2	2	8-2	2
	4-2x8	9-2	1	8-4	1	7-8	1	8-4	1	7-5	1	6-8	1
	4-2x10	11-8	1	10-6	1	9-5	2	10-6	1	9-1	2	8-2	2
	4-2x12	14-1	1	12-2	2	10-11	2	12-2	2	10-7	2	9-5	2
Roof, Ceiling & 1 Center-Bearing Floor	2-2x4	3-1	1	2-9	1	2-5	1	2-9	1	2-5	1	2-2	1
	2-2x6	4-6	1	4-0	1	3-7	2	4-1	1	3-7	2	3-3	2
	2-2x8	5-9	2	5-0	2	4-6	2	5-2	2	4-6	2	4-1	2
	2-2x10	7-0	2	6-2	2	5-6	2	6-4	2	5-6	2	5-0	2
	2-2x12	8-1	2	7-1	2	6-5	2	7-4	2	6-5	2	5-9	3
	3-2x8	7-2	1	6-3	2	5-8	2	6-5	2	5-8	2	5-1	2
	3-2x10	8-9	2	7-8	2	6-11	2	7-11	2	6-11	2	6-3	2
	3-2x12	10-2	2	8-11	2	8-0	2	9-2	2	8-0	2	7-3	2
	4-2x8	8-1	1	7-3	1	6-7	1	7-5	1	6-6	1	5-11	2
	4-2x10	10-1	1	8-10	2	8-0	2	9-1	2	8-0	2	7-2	2
	4-2x12	11-9	2	10-3	2	9-3	2	10-7	2	9-3	2	8-4	2
Roof, Ceiling & 1 Clear Span Floor	2-2x4	2-8	1	2-4	1	2-1	1	2-7	1	2-3	1	2-0	1
	2-2x6	3-11	1	3-5	2	3-0	2	3-10	2	3-4	2	3-0	2
	2-2x8	5-0	2	4-4	2	3-10	2	4-10	2	4-2	2	3-9	2
	2-2x10	6-1	2	5-3	2	4-8	2	5-11	2	5-1	2	4-7	3
	2-2x12	7-1	2	6-1	3	5-5	3	6-10	2	5-11	3	5-4	3
	3-2x8	6-3	2	5-5	2	4-10	2	6-1	2	5-3	2	4-8	2
	3-2x10	7-7	2	6-7	2	5-11	2	7-5	2	6-5	2	5-9	2
	3-2x12	8-10	2	7-8	2	6-10	2	8-7	2	7-5	2	6-8	2
	4-2x8	7-2	1	6-3	2	5-7	2	7-0	1	6-1	2	5-5	2
	4-2x10	8-9	2	7-7	2	6-10	2	8-7	2	7-5	2	6-7	2
	4-2x12	10-2	2	8-10	3	7-11	2	9-11	2	8-7	2	7-8	2

(continued)

TABLE 2308.9.5—continued
HEADER AND GIRDER SPANS[a,b] FOR EXTERIOR BEARING WALLS
(Maximum Spans for Douglas Fir-Larch, Hem-Fir, Southern Pine and Spruce-Pine-Fir[b] and Required Number of Jack Studs)

HEADERS SUPPORTING	SIZE	GROUND SNOW LOAD (psf)[e]											
		30						50					
		Building width[c] (feet)											
		20		28		36		20		28		36	
		Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]
Roof, Ceiling & 2 Center-Bearing Floors	2-2×4	2-7	1	2-3	1	2-0	1	2-6	1	2-2	1	1-11	1
	2-2×6	3-9	2	3-3	2	2-11	2	3-8	2	3-2	2	2-10	2
	2-2×8	4-9	2	4-2	2	3-9	2	4-7	2	4-0	2	3-8	2
	2-2×10	5-9	2	5-1	2	4-7	3	5-8	2	4-11	2	4-5	3
	2-2×12	6-8	2	5-10	3	5-3	3	6-6	2	5-9	3	5-2	3
	3-2×8	5-11	2	5-2	2	4-8	2	5-9	2	5-1	2	4-7	2
	3-2×10	7-3	2	6-4	2	5-8	2	7-1	2	6-2	2	5-7	2
	3-2×12	8-5	2	7-4	2	6-7	2	8-2	2	7-2	2	6-5	3
	4-2×8	6-10	1	6-0	2	5-5	2	6-8	1	5-10	2	5-3	2
	4-2×10	8-4	2	7-4	2	6-7	2	8-2	2	7-2	2	6-5	2
	4-2×12	9-8	2	8-6	2	7-8	2	9-5	2	8-3	2	7-5	2
Roof, Ceiling & 2 Clear Span Floors	2-2×4	2-1	1	1-8	1	1-6	2	2-0	1	1-8	1	1-5	2
	2-2×6	3-1	2	2-8	2	2-4	2	3-0	2	2-7	2	2-3	2
	2-2×8	3-10	2	3-4	2	3-0	3	3-10	2	3-4	2	2-11	3
	2-2×10	4-9	2	4-1	3	3-8	3	4-8	2	4-0	3	3-7	3
	2-2×12	5-6	3	4-9	3	4-3	3	5-5	3	4-8	3	4-2	3
	3-2×8	4-10	2	4-2	2	3-9	2	4-9	2	4-1	2	3-8	2
	3-2×10	5-11	2	5-1	2	4-7	3	5-10	2	5-0	2	4-6	3
	3-2×12	6-10	2	5-11	3	5-4	3	6-9	2	5-10	3	5-3	3
	4-2×8	5-7	2	4-10	2	4-4	2	5-6	2	4-9	2	4-3	2
	4-2×10	6-10	2	5-11	2	5-3	2	6-9	2	5-10	2	5-2	2
	4-2×12	7-11	2	6-10	2	6-2	3	7-9	2	6-9	2	6-0	3

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.8 N/m^2

a. Spans are given in feet and inches (ft-in).

b. ~~Tabulated values are for No.2 grade lumber.~~ Spans are based on minimum design properties for No. 2 Grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir. No. 1 or better grade lumber shall be used for southern pine.

c. Building width is measured perpendicular to the ridge. For widths between those shown, spans are permitted to be interpolated.

d. NJ = Number of jack studs required to support each end. Where the number of required jack studs equals one, the header is permitted to be supported by an *approved* framing anchor attached to the full-height wall stud and to the header.

e. Use 30 pounds per square foot ground snow load for cases in which ground snow load is less than 30 pounds per square foot and the roof live load is equal to or less than 20 pounds per square foot.

128. Table 2308.9.6, "Header and Girder Spans for Interior Bearing Walls," of Paragraph 2308.9.6, "Openings in Interior Bearing Partitions," of Subsection 2308.9, "Wall Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.9.6
HEADER AND GIRDER SPANS[a,b] FOR INTERIOR BEARING WALLS
(Maximum Spans for Douglas Fir-Larch, Hem-Fir, Southern Pine and Spruce-Pine-Fir[b] and Required Number of Jack Studs)

HEADERS AND GIRDERS SUPPORTING	SIZE	BUILDING width[c] (feet)					
		20		28		36	
		Span	NJ[d]	Span	NJ[d]	Span	NJ[d]
One Floor Only	2-2×4	3-1	1	2-8	1	2-5	1
	2-2×6	4-6	1	3-11	1	3-6	1
	2-2×8	5-9	1	5-0	2	4-5	2
	2-2×10	7-0	2	6-1	2	5-5	2
	2-2×12	8-1	2	7-0	2	6-3	2
	3-2×8	7-2	1	6-3	1	5-7	2
	3-2×10	8-9	1	7-7	2	6-9	2
	3-2×12	10-2	2	8-10	2	7-10	2
	4-2×8	9-0	1	7-8	1	6-9	1
	4-2×10	10-1	1	8-9	1	7-10	2
	4-2×12	11-9	1	10-2	2	9-1	2
Two Floors	2-2×4	2-2	1	1-10	1	1-7	1
	2-2×6	3-2	2	2-9	2	2-5	2
	2-2×8	4-1	2	3-6	2	3-2	2
	2-2×10	4-11	2	4-3	2	3-10	3
	2-2×12	5-9	2	5-0	3	4-5	3
	3-2×8	5-1	2	4-5	2	3-11	2
	3-2×10	6-2	2	5-4	2	4-10	2
	3-2×12	7-2	2	6-3	2	5-7	3
	4-2×8	6-1	1	5-3	2	4-8	2
	4-2×10	7-2	2	6-2	2	5-6	2
	4-2×12	8-4	2	7-2	2	6-5	2

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm

a. Spans are given in feet and inches (ft-in).

b. ~~Tabulated values are for No.2 grade lumber.~~ Spans are based on minimum design properties for No. 2 Grade lumber of Douglas fir-larch, hem-fir, and spruce-pine-fir. No. 1 or better grade lumber shall be used for southern pine.

c. Building width is measured perpendicular to the ridge. For widths between those shown, spans are permitted to be interpolated.

d. NJ = Number of jack studs required to support each end. Where the number of required jack studs equals one, the headers are permitted to be supported by an approved framing anchor attached to the full-height wall stud and to the header.

129. Table 2308.10.2(1), "Ceiling Joist Spans for Common Lumber Species," of Paragraph 2308.10.2, "Ceiling Joist Spans," of Subsection 2308.10, "Roof and Ceiling Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.10.2(1)
CEILING JOIST SPANS FOR COMMON LUMBER SPECIES
(Uninhabitable Attics Without Storage, Live Load = 10 pounds psf, L/Δ = 240)

CEILING JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 5 pounds per square foot			
			2 × 4	2 × 6	2 × 8	2 × 10
			Maximum ceiling joist spans			
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	13-2	20-8	26-0	26-0
	Douglas Fir-Larch	#1	12-8	19-11	26-0	26-0
	Douglas Fir-Larch	#2	12-5	19-6	25-8	26-0
	Douglas Fir-Larch	#3	10-10	15-10	20-1	24-6
	Hem-Fir	SS	12-5	19-6	25-8	26-0
	Hem-Fir	#1	12-2	19-1	25-2	26-0
	Hem-Fir	#2	11-7	18-2	24-0	26-0
	Hem-Fir	#3	10-10	15-10	20-1	24-6
	Southern Pine	SS	12-11	20-3	26-0	26-0
	Southern Pine	#1	~~12-8~~ 12-5	~~19-11~~ 19-6	~~26-0~~ 25-8	26-0
	Southern Pine	#2	~~12-5~~ 11-10	~~19-6~~ 18-8	~~25-8~~ 24-7	26-0
	Southern Pine	#3	~~11-6~~ 10-1	~~17-8~~ 14-11	~~21-8~~ 18-9	~~25-7~~ 22-9
	Spruce-Pine-Fir	SS	12-2	19-1	25-2	26-0
	Spruce-Pine-Fir	#1	11-10	18-8	24-7	26-0
	Spruce-Pine-Fir	#2	11-10	18-8	24-7	26-0
	Spruce-Pine-Fir	#3	10-10	15-10	20-1	24-6
16	Douglas Fir-Larch	SS	11-11	18-9	24-8	26-0
	Douglas Fir-Larch	#1	11-6	18-1	23-10	26-0
	Douglas Fir-Larch	#2	11-3	17-8	23-0	26-0
	Douglas Fir-Larch	#3	9-5	13-9	17-5	21-3
	Hem-Fir	SS	11-3	17-8	23-4	26-0
	Hem-Fir	#1	11-0	17-4	22-10	26-0
	Hem-Fir	#2	10-6	16-6	21-9	26-0
	Hem-Fir	#3	9-5	13-9	17-5	21-3
	Southern Pine	SS	11-9	18-5	24-3	26-0
	Southern Pine	#1	~~11-6~~ 11-3	~~18-1~~ 17-8	~~23-10~~ 23-4	26-0
	Southern Pine	#2	~~11-3~~ 10-9	~~17-8~~ 16-11	~~23-4~~ 21-7	~~26-0~~ 25-7
	Southern Pine	#3	~~10-0~~ 8-9	~~14-9~~ 12-11	~~18-9~~ 16-3	~~22-3~~ 19-9
	Spruce-Pine-Fir	SS	11-0	17-4	22-10	26-0
	Spruce-Pine-Fir	#1	10-9	16-11	22-4	26-0
	Spruce-Pine-Fir	#2	10-9	16-11	22-4	26-0
	Spruce-Pine-Fir	#3	9-5	13-9	17-5	21-3

(continued)

TABLE 2308.10.2(1)—continued
CEILING JOIST SPANS FOR COMMON LUMBER SPECIES
(Uninhabitable Attics Without Storage, Live Load = 10 pounds psf, L/Δ = 240)

CEILING JOIST SPACING (Inches)	SPECIES AND GRADE		DEAD LOAD = 5 pounds per square foot			
			2 × 4	2 × 6	2 × 8	2 × 10
			Maximum ceiling joist spans			
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Douglas Fir-Larch	SS	11-5	17-8	23-3	26-0
	Douglas Fir-Larch	#1	10-10	17-0	22-5	26-0
	Douglas Fir-Larch	#2	10-7	16-7	21-0	25-8
	Douglas Fir-Larch	#3	8-7	12-6	15-10	19-5
	Hem-Fir	SS	10-7	16-8	21-11	26-0
	Hem-Fir	#1	10-4	16-4	21-6	26-0
	Hem-Fir	#2	9-11	15-7	20-6	25-3
	Hem-Fir	#3	8-7	12-6	15-10	19-5
	Southern Pine	SS	11-0	17-4	22-10	26-0
	Southern Pine	#1	~~10-10~~ 10-7	~~17-0~~ 16-8	~~22-5~~ 22-0	26-0
	Southern Pine	#2	~~10-7~~ 10-2	~~16-8~~ 15-7	~~21-11~~ 19-8	~~26-0~~ 23-5
	Southern Pine	#3	~~9-1~~ 8-0	~~13-6~~ 11-9	~~17-2~~ 14-10	~~20-3~~ 18-0
	Spruce-Pine-Fir	SS	10-4	16-4	21-6	26-0
	Spruce-Pine-Fir	#1	10-2	15-11	21-0	25-8
	Spruce-Pine-Fir	#2	10-2	15-11	21-0	25-8
	Spruce-Pine-Fir	#3	8-7	12-6	15-10	19-5
24	Douglas Fir-Larch	SS	10-5	16-4	21-7	26-0
	Douglas Fir-Larch	#1	10-0	15-9	20-1	24-6
	Douglas Fir-Larch	#2	9-10	14-10	18-9	22-11
	Douglas Fir-Larch	#3	7-8	11-2	14-2	17-4
	Hem-Fir	SS	9-10	15-6	20-5	26-0
	Hem-Fir	#1	9-8	15-2	19-7	23-11
	Hem-Fir	#2	9-2	14-5	18-6	22-7
	Hem-Fir	#3	7-8	11-2	14-2	17-4
	Southern Pine	SS	10-3	16-1	21-2	26-0
	Southern Pine	#1	~~10-0~~ 9-10	~~15-9~~ 15-6	~~20-10~~ 20-5	~~26-0~~ 24-0
	Southern Pine	#2	~~9-10~~ 9-3	~~15-6~~ 13-11	~~20-4~~ 17-7	~~23-11~~ 20-11
	Southern Pine	#3	~~8-2~~ 7-2	~~13-0~~ 10-6	~~15-4~~ 13-3	~~18-1~~ 16-1
	Spruce-Pine-Fir	SS	9-8	15-2	19-11	25-5
	Spruce-Pine-Fir	#1	9-5	14-9	18-9	22-11
	Spruce-Pine-Fir	#2	9-5	14-9	18-9	22-11
	Spruce-Pine-Fir	#3	7-8	11-2	14-2	17-4

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.8 N/m^2.

130. Table 2308.10.2(2), "Ceiling Joist Spans for Common Lumber Species," of Paragraph 2308.10.2, "Ceiling Joist Spans," of Subsection 2308.10, "Roof and Ceiling Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.10.2(2)
CEILING JOIST SPANS FOR COMMON LUMBER SPECIES
(Uninhabitable Attics With Limited Storage, Live Load = 20 pounds per square foot, L/Δ = 240)

CEILING JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot			
			2 × 4	2 × 6	2 × 8	2 × 10
			Maximum ceiling joist spans			
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	10-5	16-4	21-7	26-0
	Douglas Fir-Larch	#1	10-0	15-9	20-1	24-6
	Douglas Fir-Larch	#2	9-10	14-10	18-9	22-11
	Douglas Fir-Larch	#3	7-8	11-2	14-2	17-4
	Hem-Fir	SS	9-10	15-6	20-5	26-0
	Hem-Fir	#1	9-8	15-2	19-7	23-11
	Hem-Fir	#2	9-2	14-5	18-6	22-7
	Hem-Fir	#3	7-8	11-2	14-2	17-4
	Southern Pine	SS	10-3	16-1	21-2	26-0
	Southern Pine	#1	~~10-0~~ 9-10	~~15-9~~ 15-6	~~20-10~~ 20-5	~~26-0~~ 24-9
	Southern Pine	#2	~~9-10~~ 9-3	~~15-6~~ 13-11	~~20-1~~ 17-7	~~23-11~~ 20-11
	Southern Pine	#3	~~8-3~~ 7-2	~~12-0~~ 10-6	~~15-1~~ 13-3	~~18-1~~ 16-1
	Spruce-Pine-Fir	SS	9-8	15-2	19-11	25-5
	Spruce-Pine-Fir	#1	9-5	14-9	18-9	22-11
	Spruce-Pine-Fir	#2	9-5	14-9	18-9	22-11
	Spruce-Pine-Fir	#3	7-8	11-2	14-2	17-4
16	Douglas Fir-Larch	SS	9-6	14-11	19-7	25-0
	Douglas Fir-Larch	#1	9-1	13-9	17-5	21-3
	Douglas Fir-Larch	#2	8-9	12-10	16-3	19-10
	Douglas Fir-Larch	#3	6-8	9-8	12-4	15-0
	Hem-Fir	SS	8-11	14-1	18-6	23-8
	Hem-Fir	#1	8-9	13-5	16-10	20-8
	Hem-Fir	#2	8-4	12-8	16-0	19-7
	Hem-Fir	#3	6-8	9-8	12-4	15-0
	Southern Pine	SS	9-4	14-7	19-3	24-7
	Southern Pine	#1	~~9-1~~ 8-11	~~14-4~~ 14-0	~~18-11~~ 17-9	~~23-1~~ 20-9
	Southern Pine	#2	~~8-11~~ 8-0	~~13-6~~ 12-0	~~17-6~~ 15-2	~~20-9~~ 18-1
	Southern Pine	#3	~~7-1~~ 6-2	~~10-5~~ 9-2	~~13-3~~ 11-6	~~15-8~~ 14-0
	Spruce-Pine-Fir	SS	8-9	13-9	18-1	23-1
	Spruce-Pine-Fir	#1	8-7	12-10	16-3	19-10
	Spruce-Pine-Fir	#2	8-7	12-10	16-3	19-10
	Spruce-Pine-Fir	#3	6-8	9-8	12-4	15-0

(continued)

TABLE 2308.10.2(2)—continued
CEILING JOIST SPANS FOR COMMON LUMBER SPECIES
(Uninhabitable Attics With Limited Storage, Live Load = 20 pounds per square foot, L/Δ = 240)

CEILING JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot			
			2 × 4	2 × 6	2 × 8	2 × 10
			Maximum ceiling joist spans			
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Douglas Fir-Larch	SS	8-11	14-0	18-5	23-4
	Douglas Fir-Larch	#1	8-7	12-6	15-10	19-5
	Douglas Fir-Larch	#2	8-0	11-9	14-10	18-2
	Douglas Fir-Larch	#3	6-1	8-10	11-3	13-8
	Hem-Fir	SS	8-5	13-3	17-5	22-3
	Hem-Fir	#1	8-3	12-3	15-6	18-11
	Hem-Fir	#2	7-10	11-7	14-8	17-10
	Hem-Fir	#3	6-1	8-10	11-3	13-8
	Southern Pine	SS	8-9	13-9	~~18-1~~ 18-2	23-1
	Southern Pine	#1	~~8-7~~ 8-5	~~13-6~~ 12-9	~~17-9~~ 16-2	~~21-1~~ 18-11
	Southern Pine	#2	~~8-5~~ 7-4	~~12-5~~ 11-0	~~15-10~~ 13-11	~~18-11~~ 16-6
	Southern Pine	#3	~~6-5~~ 5-8	~~9-6~~ 8-4	~~12-1~~ 10-6	~~14-4~~ 12-9
	Spruce-Pine-Fir	SS	8-3	12-11	17-1	21-8
	Spruce-Pine-Fir	#1	8-0	11-9	14-10	18-2
	Spruce-Pine-Fir	#2	8-0	11-9	14-10	18-2
	Spruce-Pine-Fir	#3	6-1	8-10	11-3	13-8
24	Douglas Fir-Larch	SS	8-3	13-0	17-1	20-11
	Douglas Fir-Larch	#1	7-8	11-2	14-2	17-4
	Douglas Fir-Larch	#2	7-2	10-6	13-3	16-3
	Douglas Fir-Larch	#3	5-5	7-11	10-0	12-3
	Hem-Fir	SS	7-10	12-3	16-2	20-6
	Hem-Fir	#1	7-6	10-11	13-10	16-11
	Hem-Fir	#2	7-1	10-4	13-1	16-0
	Hem-Fir	#3	5-5	7-11	10-0	12-3
	Southern Pine	SS	8-1	12-9	16-10	21-0
	Southern Pine	#1	~~8-0~~ 7-8	~~12-6~~ 11-5	~~15-10~~ 14-6	~~18-10~~ 16-11
	Southern Pine	#2	~~7-8~~ 6-7	~~11-0~~ 9-10	~~14-2~~ 12-6	~~16-11~~ 14-9
	Southern Pine	#3	~~8-0~~ 5-1	~~8-6~~ 7-5	~~10-10~~ 9-5	~~12-10~~ 11-5
	Spruce-Pine-Fir	SS	7-8	12-0	15-10	19-5
	Spruce-Pine-Fir	#1	7-2	10-6	13-3	16-3
	Spruce-Pine-Fir	#2	7-2	10-6	13-3	16-3
	Spruce-Pine-Fir	#3	5-5	7-11	10-0	12-3

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.8 N/m^2

131. Table 2308.10.3(1), "Rafter Spans for Common Lumber Species," of Paragraph 2308.10.3, "Rafter Spans," of Subsection 2308.10, "Roof and Ceiling Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.10.3(1)
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Roof Live Load = 20 pounds per square foot, Ceiling Not Attached to Rafters, L/Δ = 180)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	11-6	18-0	23-9	26-0	26-0	11-6	18-0	23-5	26-0	26-0
	Douglas Fir-Larch	#1	11-1	17-4	22-5	26-0	26-0	10-6	15-4	19-5	23-9	26-0
	Douglas Fir-Larch	#2	10-10	16-7	21-0	25-8	26-0	9-10	14-1	18-2	22-3	25-9
	Douglas Fir-Larch	#3	8-7	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9	19-6
	Hem-Fir	SS	10-10	17-0	22-5	26-0	26-0	10-10	17-0	22-5	26-0	26-0
	Hem-Fir	#1	10-7	16-8	21-10	26-0	26-0	10-3	14-11	18-11	23-2	26-0
	Hem-Fir	#2	10-1	15-11	20-8	25-3	26-0	9-8	14-2	17-11	21-11	25-5
	Hem-Fir	#3	8-7	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9	19-6
	Southern Pine	SS	11-3	17-8	23-4	26-0	26-0	11-3	17-8	23-4	26-0	26-0
	Southern Pine	#1	~~11-1~~ 10-10	~~17-4~~ 17-0	~~22-11~~ 22-5	26-0	26-0	~~11-1~~ 10-6	~~17-3~~ 15-8	~~21-9~~ 19-10	~~25-10~~ 23-2	26-0
	Southern Pine	#2	~~10-10~~ 10-4	~~17-0~~ 15-7	~~22-5~~ 19-8	~~26-0~~ 23-5	26-0	~~10-6~~ 9-0	~~15-1~~ 13-6	~~19-8~~ 17-1	~~23-2~~ 20-3	~~26-0~~ 23-10
	Southern Pine	#3	~~9-1~~ 8-0	~~13-6~~ 11-9	~~17-2~~ 14-10	~~20-3~~ 18-0	~~24-1~~ 21-4	~~7-11~~ 6-11	~~11-8~~ 10-2	~~14-10~~ 12-10	~~17-6~~ 15-7	~~20-11~~ 18-6
	Spruce-Pine-Fir	SS	10-7	16-8	21-11	26-0	26-0	10-7	16-8	21-9	26-0	26-0
	Spruce-Pine-Fir	#1	10-4	16-3	21-0	25-8	26-0	9-10	14-4	18-2	22-3	25-9
	Spruce-Pine-Fir	#2	10-4	16-3	21-0	25-8	26-0	9-10	14-4	18-2	22-3	25-9
	Spruce-Pine-Fir	#3	8-7	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9	19-6
16	Douglas Fir-Larch	SS	10-5	16-4	21-7	26-0	26-0	10-5	16-0	20-3	24-9	26-0
	Douglas Fir-Larch	#1	10-0	15-4	19-5	23-9	26-0	9-1	13-3	16-10	20-7	23-10
	Douglas Fir-Larch	#2	9-10	14-4	18-2	22-3	25-9	8-6	12-5	15-9	19-3	22-4
	Douglas Fir-Larch	#3	7-5	10-10	13-9	16-9	19-6	6-5	9-5	11-11	14-6	16-10
	Hem-Fir	SS	9-10	15-6	20-5	26-0	26-0	9-10	15-6	19-11	24-4	26-0
	Hem-Fir	#1	9-8	14-11	18-11	23-2	26-0	8-10	12-11	16-5	20-0	23-3
	Hem-Fir	#2	9-2	14-2	17-11	21-11	25-5	8-5	12-3	15-6	18-11	22-0
	Hem-Fir	#3	7-5	10-10	13-9	16-9	19-6	6-5	9-5	11-11	14-6	16-10
	Southern Pine	SS	10-3	16-1	21-2	26-0	26-0	10-3	16-1	21-2	~~26-0~~ 25-7	26-0
	Southern Pine	#1	~~10-0~~ 9-10	~~15-9~~ 15-6	~~20-10~~ 19-10	~~25-10~~ 23-2	26-0	~~10-0~~ 9-1	~~15-0~~ 13-7	~~18-10~~ 17-2	~~22-4~~ 20-1	~~26-0~~ 23-10
	Southern Pine	#2	~~9-10~~ 9-0	~~15-1~~ 13-6	~~19-5~~ 17-1	~~23-2~~ 20-3	~~26-0~~ 23-10	~~9-1~~ 7-9	~~13-0~~ 11-8	~~16-10~~ 14-9	~~20-1~~ 17-6	~~23-7~~ 20-8
	Southern Pine	#3	~~7-11~~ 6-11	~~11-8~~ 10-2	~~14-10~~ 12-10	~~17-6~~ 15-7	~~20-11~~ 18-6	~~6-10~~ 6-0	~~10-3~~ 8-10	~~12-10~~ 11-2	~~15-3~~ 13-6	~~18-1~~ 16-0
	Spruce-Pine-Fir	SS	9-8	15-2	19-11	25-5	26-0	9-8	14-10	18-10	23-0	26-0
	Spruce-Pine-Fir	#1	9-5	14-4	18-2	22-3	25-9	8-6	12-5	15-9	19-3	22-4
	Spruce-Pine-Fir	#2	9-5	14-4	18-2	22-3	25-9	8-6	12-5	15-9	19-3	22-4
	Spruce-Pine-Fir	#3	7-5	10-10	13-9	16-9	19-6	6-5	9-5	11-11	14-6	16-10

(continued)

TABLE 2308.10.3(1)—continued
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Roof Live Load = 20 pounds per square foot, Ceiling Not Attached to Rafters, L/Δ = 180)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Douglas Fir-Larch	SS	9-10	15-5	20-4	25-11	26-0	9-10	14-7	18-6	22-7	26-0
	Douglas Fir-Larch	#1	9-5	14-0	17-9	21-8	25-2	8-4	12-2	15-4	18-9	21-9
	Douglas Fir-Larch	#2	8-11	13-1	16-7	20-3	23-6	7-9	11-4	14-4	17-7	20-4
	Douglas Fir-Larch	#3	6-9	9-11	12-7	15-4	17-9	5-10	8-7	10-10	13-3	15-5
	Hem-Fir	SS	9-3	14-7	19-2	24-6	26-0	9-3	14-4	18-2	22-3	25-9
	Hem-Fir	#1	9-1	13-8	17-4	21-1	24-6	8-1	11-10	15-0	18-4	21-3
	Hem-Fir	#2	8-8	12-11	16-4	20-0	23-2	7-8	11-2	14-2	17-4	20-1
	Hem-Fir	#3	6-9	9-11	12-7	15-4	17-9	5-10	8-7	10-10	13-3	15-5
	Southern Pine	SS	9-8	15-2	19-11	25-5	26-0	9-8	15-2	~~19-11~~ 19-7	~~25-5~~ 23-4	26-0
	Southern Pine	#1	~~9-5~~ 9-3	~~14-10~~ 14-3	~~19-7~~ 18-1	~~23-7~~ 21-2	~~26-0~~ 25-2	~~9-3~~ 8-4	~~13-8~~ 12-4	~~17-3~~ 15-8	~~20-5~~ 18-4	~~24-4~~ 21-9
	Southern Pine	#2	~~9-3~~ 8-2	~~13-9~~ 12-3	~~17-9~~ 15-7	~~21-2~~ 18-6	~~24-10~~ 21-9	~~8-4~~ 7-1	~~11-11~~ 10-8	~~15-4~~ 13-6	~~18-4~~ 16-0	~~21-6~~ 18-10
	Southern Pine	#3	~~7-3~~ 6-4	~~10-8~~ 9-4	~~13-7~~ 11-9	~~16-0~~ 14-3	~~18-4~~ 16-10	~~6-3~~ 5-6	~~9-3~~ 8-1	~~11-9~~ 10-2	~~13-10~~ 12-4	~~16-6~~ 14-7
	Spruce-Pine-Fir	SS	9-1	14-3	18-9	23-11	26-0	9-1	13-7	17-2	21-0	24-4
	Spruce-Pine-Fir	#1	8-10	13-1	16-7	20-3	23-6	7-9	11-4	14-4	17-7	20-4
	Spruce-Pine-Fir	#2	8-10	13-1	16-7	20-3	23-6	7-9	11-4	14-4	17-7	20-4
	Spruce-Pine-Fir	#3	6-9	9-11	12-7	15-4	17-9	5-10	8-7	10-10	13-3	15-5
24	Douglas Fir-Larch	SS	9-1	14-4	18-10	23-4	26-0	8-11	13-1	16-7	20-3	23-5
	Douglas Fir-Larch	#1	8-7	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9	19-6
	Douglas Fir-Larch	#2	8-0	11-9	14-10	18-2	21-0	6-11	10-2	12-10	15-8	18-3
	Douglas Fir-Larch	#3	6-1	8-10	11-3	13-8	15-11	5-3	7-8	9-9	11-10	13-9
	Hem-Fir	SS	8-7	13-6	17-10	22-9	26-0	8-7	12-10	16-3	19-10	23-0
	Hem-Fir	#1	8-4	12-3	15-6	18-11	21-11	7-3	10-7	13-5	16-4	19-0
	Hem-Fir	#2	7-11	11-7	14-8	17-10	20-9	6-10	10-0	12-8	15-6	17-11
	Hem-Fir	#3	6-1	8-10	11-3	13-8	15-11	5-3	7-8	9-9	11-10	13-9
	Southern Pine	SS	8-11	14-1	18-6	23-8	26-0	8-11	~~14-1~~ 13-10	~~18-6~~ 17-6	~~23-11~~ 20-10	~~26-0~~ 24-8
	Southern Pine	#1	~~8-9~~ 8-7	~~13-9~~ 12-9	~~17-9~~ 16-2	~~21-1~~ 18-11	~~25-2~~ 22-6	~~8-3~~ 7-5	~~12-3~~ 11-1	~~15-4~~ 14-0	~~18-3~~ 16-5	~~21-9~~ 19-6
	Southern Pine	#2	~~8-7~~ 7-4	~~12-3~~ 11-0	~~15-10~~ 13-11	~~18-11~~ 16-6	~~22-3~~ 19-6	~~7-5~~ 6-4	~~10-8~~ 9-6	~~13-9~~ 12-1	~~16-5~~ 14-4	~~19-3~~ 16-10
	Southern Pine	#3	~~6-5~~ 5-8	~~9-6~~ 8-4	~~13-1~~ 10-6	~~14-4~~ 12-9	~~17-1~~ 15-1	~~5-3~~ 4-11	~~8-3~~ 7-3	~~10-6~~ 9-1	~~12-5~~ 11-0	~~14-9~~ 13-1
	Spruce-Pine-Fir	SS	8-5	13-3	17-5	21-8	25-2	8-4	12-2	15-4	18-9	21-9
	Spruce-Pine-Fir	#1	8-0	11-9	14-10	18-2	21-0	6-11	10-2	12-10	15-8	18-3
	Spruce-Pine-Fir	#2	8-0	11-9	14-10	18-2	21-0	6-11	10-2	12-10	15-8	18-3
	Spruce-Pine-Fir	#3	6-1	8-10	11-3	13-8	15-11	5-3	7-8	9-9	11-10	13-9

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.9 N/m^2.

132. Table 2308.10.3(2), "Rafter Spans for Common Lumber Species," of Paragraph 2308.10.3, "Rafter Spans," of Subsection 2308.10, "Roof and Ceiling Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.10.3(2)
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Roof Live Load = 20 pounds per square foot, Ceiling Attached to Rafters, L/Δ = 240)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	10-5	16-4	21-7	26-0	26-0	10-5	16-4	21-7	26-0	26-0
	Douglas Fir-Larch	#1	10-0	15-9	20-10	26-0	26-0	10-0	15-4	19-5	23-9	26-0
	Douglas Fir-Larch	#2	9-10	15-6	20-5	25-8	26-0	9-10	14-4	18-2	22-3	25-9
	Douglas Fir-Larch	#3	8-7	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9	19-6
	Hem-Fir	SS	9-10	15-6	20-5	26-0	26-0	9-10	15-6	20-5	26-0	26-0
	Hem-Fir	#1	9-8	15-2	19-11	25-5	26-0	9-8	14-11	18-11	23-2	26-0
	Hem-Fir	#2	9-2	14-5	19-0	24-3	26-0	9-2	14-2	17-11	21-11	25-5
	Hem-Fir	#3	8-7	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9	19-6
	Southern Pine	SS	10-3	16-1	21-2	26-0	26-0	10-3	16-1	21-2	26-0	26-0
	Southern Pine	#1	~~10-0~~ 9-10	~~15-9~~ 15-5	~~20-10~~ 20-5	26-0	26-0	~~10-0~~ 9-10	~~15-9~~ 15-6	~~20-10~~ 19-10	~~25-10~~ 23-2	26-0
	Southern Pine	#2	~~9-10~~ 9-5	~~15-6~~ 14-9	~~20-5~~ 19-6	~~26-0~~ 23-5	26-0	~~9-10~~ 9-0	~~15-1~~ 13-6	~~19-5~~ 17-1	~~23-2~~ 20-3	~~26-0~~ 23-10
	Southern Pine	#3	~~9-1~~ 8-0	~~13-6~~ 11-9	~~17-2~~ 14-10	~~20-3~~ 18-0	~~24-1~~ 21-4	~~7-11~~ 6-11	~~11-8~~ 10-2	~~14-10~~ 12-10	~~17-6~~ 15-7	~~20-11~~ 18-6
	Spruce-Pine-Fir	SS	9-8	15-2	19-11	25-5	26-0	9-8	15-2	19-11	25-5	26-0
	Spruce-Pine-Fir	#1	9-5	14-9	19-6	24-10	26-0	9-5	14-4	18-2	22-3	25-9
	Spruce-Pine-Fir	#2	9-5	14-9	19-6	24-10	26-0	9-5	14-4	18-2	22-3	25-9
	Spruce-Pine-Fir	#3	8-7	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9	19-6
16	Douglas Fir-Larch	SS	9-6	14-11	19-7	25-0	26-0	9-6	14-11	19-7	24-9	26-0
	Douglas Fir-Larch	#1	9-1	14-4	18-11	23-9	26-0	9-1	13-3	16-10	20-7	23-10
	Douglas Fir-Larch	#2	8-11	14-1	18-2	22-3	25-9	8-6	12-5	15-9	19-3	22-4
	Douglas Fir-Larch	#3	7-5	10-10	13-9	16-9	19-6	6-5	9-5	11-11	14-6	16-10
	Hem-Fir	SS	8-11	14-1	18-6	23-8	26-0	8-11	14-1	18-6	23-8	26-0
	Hem-Fir	#1	8-9	13-9	18-1	23-1	26-0	8-9	12-11	16-5	20-0	23-3
	Hem-Fir	#2	8-4	13-1	17-3	21-11	25-3	8-4	12-3	15-6	18-11	22-0
	Hem-Fir	#3	7-5	10-10	13-9	16-9	19-6	6-5	9-5	11-11	14-6	16-10
	Southern Pine	SS	9-4	14-7	19-3	24-7	26-0	9-4	14-7	19-3	24-7	26-0
	Southern Pine	#1	~~9-4~~ 8-11	~~14-4~~ 14-1	~~18-11~~ 18-6	~~24-1~~ 23-2	26-0	~~9-4~~ 8-11	~~14-6~~ 13-7	~~18-10~~ 17-2	~~22-4~~ 20-1	~~26-0~~ 23-10
	Southern Pine	#2	~~8-11~~ 8-7	~~14-1~~ 13-5	~~18-6~~ 17-1	~~23-2~~ 20-3	~~26-0~~ 23-10	~~8-11~~ 7-9	~~13-9~~ 11-8	~~16-10~~ 14-9	~~20-1~~ 17-6	~~23-7~~ 20-8
	Southern Pine	#3	~~7-11~~ 6-11	~~11-8~~ 10-2	~~14-10~~ 12-10	~~17-6~~ 15-7	~~20-11~~ 18-6	~~6-10~~ 6-0	~~10-1~~ 8-10	~~13-10~~ 11-2	~~15-3~~ 13-6	~~18-1~~ 16-0
	Spruce-Pine-Fir	SS	8-9	13-9	18-1	23-1	26-0	8-9	13-9	18-1	23-0	26-0
	Spruce-Pine-Fir	#1	8-7	13-5	17-9	22-3	25-9	8-6	12-5	15-9	19-3	22-4
	Spruce-Pine-Fir	#2	8-7	13-5	17-9	22-3	25-9	8-6	12-5	15-9	19-3	22-4
	Spruce-Pine-Fir	#3	7-5	10-10	13-9	16-9	19-6	6-5	9-5	11-11	14-6	16-10

(continued)

TABLE 2308.10.3(2)—continued
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Roof Live Load = 20 pounds per square foot, Ceiling Attached to Rafters, L/Δ = 240)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Douglas Fir-Larch	SS	8-11	14-0	18-5	23-7	26-0	8-11	14-0	18-5	22-7	26-0
	Douglas Fir-Larch	#1	8-7	13-6	17-9	21-8	25-2	8-4	12-2	15-4	18-9	21-9
	Douglas Fir-Larch	#2	8-5	13-1	16-7	20-3	23-6	7-9	11-4	14-4	17-7	20-4
	Douglas Fir-Larch	#3	6-9	9-11	12-7	15-4	17-9	5-10	8-7	10-10	13-3	15-5
	Hem-Fir	SS	8-5	13-3	17-5	22-3	26-0	8-5	13-3	17-5	22-3	25-9
	Hem-Fir	#1	8-3	12-11	17-1	21-1	24-6	8-1	11-10	15-0	18-4	21-3
	Hem-Fir	#2	7-10	12-4	16-3	20-0	23-2	7-8	11-2	14-2	17-4	20-1
	Hem-Fir	#3	6-9	9-11	12-7	15-4	17-9	5-10	8-7	10-10	13-3	15-5
	Southern Pine	SS	8-9	13-9	~~18-1~~ 18-2	23-1	26-0	8-9	13-9	~~18-1~~ 18-2	23-1	26-0
	Southern Pine	#1	~~8-7~~ 8-5	~~13-6~~ 13-3	~~17-9~~ 17-5	~~22-8~~ 21-2	~~Note 6~~ 25-2	~~8-7~~ 8-4	~~13-6~~ 12-4	~~17-2~~ 15-8	~~20-5~~ 18-4	~~24-4~~ 21-9
	Southern Pine	#2	~~8-5~~ 8-1	~~13-3~~ 12-3	~~17-5~~ 15-7	~~21-2~~ 18-6	~~24-10~~ 21-9	~~8-4~~ 7-1	~~11-11~~ 10-8	~~15-4~~ 13-6	~~18-4~~ 16-0	~~21-6~~ 18-10
	Southern Pine	#3	~~7-3~~ 6-4	~~10-8~~ 9-4	~~13-7~~ 11-9	~~16-0~~ 14-3	~~19-1~~ 16-10	~~6-3~~ 5-6	~~9-3~~ 8-1	~~11-9~~ 10-2	~~13-10~~ 12-4	~~16-6~~ 14-7
	Spruce-Pine-Fir	SS	8-3	12-11	17-1	21-9	26-0	8-3	12-11	17-1	21-0	24-4
	Spruce-Pine-Fir	#1	8-1	12-8	16-7	20-3	23-6	7-9	11-4	14-4	17-7	20-4
	Spruce-Pine-Fir	#2	8-1	12-8	16-7	20-3	23-6	7-9	11-4	14-4	17-7	20-4
	Spruce-Pine-Fir	#3	6-9	9-11	12-7	15-4	17-9	5-10	8-7	10-10	13-3	15-5
24	Douglas Fir-Larch	SS	8-3	13-0	17-2	21-10	26-0	8-3	13-0	16-7	20-3	23-5
	Douglas Fir-Larch	#1	8-0	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9	19-6
	Douglas Fir-Larch	#2	7-10	11-9	14-10	18-2	21-0	6-11	10-2	12-10	15-8	18-3
	Douglas Fir-Larch	#3	6-1	8-10	11-3	13-8	15-11	5-3	7-8	9-9	11-10	13-9
	Hem-Fir	SS	7-10	12-3	16-2	20-8	25-1	7-10	12-3	16-2	19-10	23-0
	Hem-Fir	#1	7-8	12-0	15-6	18-11	21-11	7-3	10-7	13-5	16-4	19-0
	Hem-Fir	#2	7-3	11-5	14-8	17-10	20-9	6-10	10-0	12-8	15-6	17-11
	Hem-Fir	#3	6-1	8-10	11-3	13-8	15-11	5-3	7-8	9-9	11-10	13-9
	Southern Pine	SS	8-1	12-9	16-10	21-6	26-0	8-1	12-9	16-10	~~21-6~~ 20-10	~~26-0~~ 24-8
	Southern Pine	#1	~~8-0~~ 7-10	~~12-6~~ 12-3	~~16-6~~ 16-2	~~21-1~~ 18-11	~~25-8~~ 22-6	~~8-0~~ 7-5	~~12-2~~ 11-1	~~15-4~~ 14-0	~~18-3~~ 16-5	~~21-9~~ 19-6
	Southern Pine	#2	~~7-10~~ 7-4	~~12-3~~ 11-0	~~15-10~~ 13-11	~~18-11~~ 16-6	~~22-3~~ 19-6	~~7-5~~ 6-4	~~10-8~~ 9-6	~~13-9~~ 12-1	~~16-5~~ 14-4	~~19-3~~ 16-10
	Southern Pine	#3	~~6-5~~ 5-8	~~9-6~~ 8-4	~~12-1~~ 10-6	~~14-4~~ 12-9	~~17-1~~ 15-1	~~5-7~~ 4-11	~~8-3~~ 7-3	~~10-6~~ 9-1	~~12-8~~ 11-0	~~14-9~~ 13-1
	Spruce-Pine-Fir	SS	7-8	12-0	15-10	20-2	24-7	7-8	12-0	15-4	18-9	21-9
	Spruce-Pine-Fir	#1	7-6	11-9	14-10	18-2	21-0	6-11	10-2	12-10	15-8	18-3
	Spruce-Pine-Fir	#2	7-6	11-9	14-10	18-2	21-0	6-11	10-2	12-10	15-8	18-3
	Spruce-Pine-Fir	#3	6-1	8-10	11-3	13-8	15-11	5-3	7-8	9-9	11-10	13-9

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.9 N/m^2.

133. Table 2308.10.3(3), "Rafter Spans for Common Lumber Species," of Paragraph 2308.10.3, "Rafter Spans," of Subsection 2308.10, "Roof and Ceiling Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.10.3(3)
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Ground Snow Load = 30 pounds per square foot, Ceiling Not Attached to Rafters, L/Δ = 180)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	10-0	15-9	20-9	26-0	26-0	10-0	15-9	20-1	24-6	26-0
	Douglas Fir-Larch	#1	9-8	14-9	18-8	22-9	26-0	9-0	13-2	16-8	20-4	23-7
	Douglas Fir-Larch	#2	9-5	13-9	17-5	21-4	24-8	8-5	12-4	15-7	19-1	22-1
	Douglas Fir-Larch	#3	7-1	10-5	13-2	16-1	18-8	6-4	9-4	11-9	14-5	16-8
	Hem-Fir	SS	9-6	14-10	19-7	25-0	26-0	9-6	14-10	19-7	24-1	26-0
	Hem-Fir	#1	9-3	14-4	18-2	22-2	25-9	8-9	12-10	16-3	19-10	23-0
	Hem-Fir	#2	8-10	13-7	17-2	21-0	24-4	8-4	12-2	15-4	18-9	21-9
	Hem-Fir	#3	7-1	10-5	13-2	16-1	18-8	6-4	9-4	11-9	14-5	16-8
	Southern Pine	SS	9-10	15-6	20-5	26-0	26-0	9-10	15-6	20-5	~~26-0~~ 25-4	26-0
	Southern Pine	#1	~~9-8~~ 9-6	~~15-2~~ 14-10	~~20-0~~ 19-0	~~24-9~~ 22-3	26-0	~~9-8~~ 9-0	~~14-10~~ 13-5	~~18-8~~ 17-0	~~22-2~~ 19-11	~~26-0~~ 23-7
	Southern Pine	#2	~~9-6~~ 8-7	~~14-5~~ 12-11	~~18-8~~ 16-4	~~22-3~~ 19-5	~~26-0~~ 22-10	~~9-0~~ 7-8	~~12-11~~ 11-7	~~16-8~~ 14-8	~~19-11~~ 17-4	~~23-4~~ 20-5
	Southern Pine	#3	~~7-3~~ 6-7	~~11-2~~ 9-9	~~14-3~~ 12-4	~~16-10~~ 15-0	~~20-0~~ 17-9	~~6-9~~ 5-11	~~10-0~~ 8-9	~~12-9~~ 11-0	~~15-4~~ 13-5	~~17-11~~ 15-10
	Spruce-Pine-Fir	SS	9-3	14-7	19-2	24-6	26-0	9-3	14-7	18-8	22-9	26-0
	Spruce-Pine-Fir	#1	9-1	13-9	17-5	21-4	24-8	8-5	12-4	15-7	19-1	22-1
	Spruce-Pine-Fir	#2	9-1	13-9	17-5	21-4	24-8	8-5	12-4	15-7	19-1	22-1
	Spruce-Pine-Fir	#3	7-1	10-5	13-2	16-1	18-8	6-4	9-4	11-9	14-5	16-8
16	Douglas Fir-Larch	SS	9-1	14-4	18-10	23-9	26-0	9-1	13-9	17-5	21-3	24-8
	Douglas Fir-Larch	#1	8-9	12-9	16-2	19-9	22-10	7-10	11-5	14-5	17-8	20-5
	Douglas Fir-Larch	#2	8-2	11-11	15-1	18-5	21-5	7-3	10-8	13-6	16-6	19-2
	Douglas Fir-Larch	#3	6-2	9-0	11-5	13-11	16-2	5-6	8-1	10-3	12-6	14-6
	Hem-Fir	SS	8-7	13-6	17-10	22-9	26-0	8-7	13-6	17-1	20-10	24-2
	Hem-Fir	#1	8-5	12-5	15-9	19-3	22-3	7-7	11-1	14-1	17-2	19-11
	Hem-Fir	#2	8-0	11-9	14-11	18-2	21-1	7-2	10-6	13-4	16-3	18-10
	Hem-Fir	#3	6-2	9-0	11-5	13-11	16-2	5-6	8-1	10-3	12-6	14-6
	Southern Pine	SS	8-11	14-1	18-6	23-8	26-0	8-11	14-1	~~18-6~~ 18-5	~~23-8~~ 21-11	~~26-0~~ 25-11
	Southern Pine	#1	~~8-9~~ 8-7	~~13-8~~ 13-0	~~18-1~~ 16-6	~~21-6~~ 19-3	~~25-7~~ 22-10	~~8-8~~ 7-10	~~12-10~~ 11-7	~~16-2~~ 14-9	~~19-2~~ 17-3	~~22-10~~ 20-5
	Southern Pine	#2	~~8-7~~ 7-6	~~12-6~~ 11-2	~~16-2~~ 14-2	~~19-3~~ 16-10	~~22-7~~ 19-10	~~7-10~~ 6-8	~~11-2~~ 10-0	~~14-5~~ 12-8	~~17-3~~ 15-1	~~20-3~~ 17-9
	Southern Pine	#3	~~6-7~~ 5-9	~~9-8~~ 8-6	~~12-4~~ 10-8	~~14-7~~ 13-0	~~17-4~~ 15-4	~~5-10~~ 5-2	~~8-8~~ 7-7	~~11-0~~ 9-7	~~13-9~~ 11-7	~~15-6~~ 13-9
	Spruce-Pine-Fir	SS	8-5	13-3	17-5	22-1	25-7	8-5	12-9	16-2	19-9	22-10
	Spruce-Pine-Fir	#1	8-2	11-11	15-1	18-5	21-5	7-3	10-8	13-6	16-6	19-2
	Spruce-Pine-Fir	#2	8-2	11-11	15-1	18-5	21-5	7-3	10-8	13-6	16-6	19-2
	Spruce-Pine-Fir	#3	6-2	9-0	11-5	13-11	16-2	5-6	8-1	10-3	12-6	14-6

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TABLE 2308.10.3(3)—continued
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Ground Snow Load = 30 pounds per square foot, Ceiling Not Attached to Rafters, L/Δ = 180)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Douglas Fir-Larch	SS	8-7	13-6	17-9	21-8	25-2	8-7	12-6	15-10	19-5	22-6
	Douglas Fir-Larch	#1	7-11	11-8	14-9	18-0	20-11	7-1	10-5	13-2	16-1	18-8
	Douglas Fir-Larch	#2	7-5	10-11	13-9	16-10	19-6	6-8	9-9	12-4	15-1	17-6
	Douglas Fir-Larch	#3	5-7	8-3	10-5	12-9	14-9	5-0	7-4	9-4	11-5	13-2
	Hem-Fir	SS	8-1	12-9	16-9	21-4	24-8	8-1	12-4	15-7	19-1	22-1
	Hem-Fir	#1	7-9	11-4	14-4	17-7	20-4	6-11	10-2	12-10	15-8	18-2
	Hem-Fir	#2	7-4	10-9	13-7	16-7	19-3	6-7	9-7	12-2	14-10	17-3
	Hem-Fir	#3	5-7	8-3	10-5	12-9	14-9	5-0	7-4	9-4	11-5	13-2
	Southern Pine	SS	8-5	13-3	17-5	22-3	26-0	8-5	13-3	~~17-5~~ 16-10	~~22-0~~ 20-0	~~25-9~~ 23-7
	Southern Pine	#1	~~8-3~~ 8-0	~~12-9~~ 11-10	~~16-6~~ 15-1	~~19-7~~ 17-7	~~23-4~~ 20-11	~~7-11~~ 7-1	~~11-9~~ 10-7	~~14-9~~ 13-5	~~17-6~~ 15-9	~~20-11~~ 18-8
	Southern Pine	#2	~~7-11~~ 6-10	~~11-5~~ 10-2	~~14-9~~ 12-11	~~17-7~~ 15-4	~~20-7~~ 18-1	~~7-1~~ 6-1	~~10-3~~ 9-2	~~13-2~~ 11-7	~~15-9~~ 13-9	~~18-5~~ 16-2
	Southern Pine	#3	~~6-0~~ 5-3	~~8-10~~ 7-9	~~11-3~~ 9-9	~~13-4~~ 11-10	~~15-10~~ 14-0	~~5-4~~ 4-8	~~7-11~~ 6-11	~~10-1~~ 8-9	~~11-11~~ 10-7	~~14-3~~ 12-6
	Spruce-Pine-Fir	SS	7-11	12-5	16-5	20-2	23-4	7-11	11-8	14-9	18-0	20-11
	Spruce-Pine-Fir	#1	7-5	10-11	13-9	16-10	19-6	6-8	9-9	12-4	15-1	17-6
	Spruce-Pine-Fir	#2	7-5	10-11	13-9	16-10	19-6	6-8	9-9	12-4	15-1	17-6
	Spruce-Pine-Fir	#3	5-7	8-3	10-5	12-9	14-9	5-0	7-4	9-4	11-5	13-2
24	Douglas Fir-Larch	SS	7-11	12-6	15-10	19-5	22-6	7-8	11-3	14-2	17-4	20-1
	Douglas Fir-Larch	#1	7-1	10-5	13-2	16-1	18-8	6-4	9-4	11-9	14-5	16-8
	Douglas Fir-Larch	#2	6-8	9-9	12-4	15-1	17-6	5-11	8-8	11-0	13-6	15-7
	Douglas Fir-Larch	#3	5-0	7-4	9-4	11-5	13-2	4-6	6-7	8-4	10-2	11-10
	Hem-Fir	SS	7-6	11-10	15-7	19-1	22-1	7-6	11-0	13-11	17-0	19-9
	Hem-Fir	#1	6-11	10-2	12-10	15-8	18-2	6-2	9-1	11-6	14-0	16-3
	Hem-Fir	#2	6-7	9-7	12-2	14-10	17-3	5-10	8-7	10-10	13-3	15-5
	Hem-Fir	#3	5-0	7-4	9-4	11-5	13-2	4-6	6-7	8-4	10-2	11-10
	Southern Pine	SS	7-10	12-3	16-2	~~20-8~~ 20-0	~~25-1~~ 23-7	7-10	~~13-3~~ 11-10	~~16-2~~ 15-0	~~19-8~~ 17-11	~~23-0~~ 21-2
	Southern Pine	#1	~~7-8~~ 7-1	~~11-9~~ 10-7	~~14-9~~ 13-5	~~17-6~~ 15-9	~~20-11~~ 18-8	~~7-1~~ 6-4	~~10-6~~ 9-6	~~13-2~~ 12-0	~~15-8~~ 14-1	~~18-8~~ 16-8
	Southern Pine	#2	~~7-4~~ 6-1	~~10-3~~ 9-2	~~13-3~~ 11-7	~~15-9~~ 13-9	~~18-5~~ 16-2	~~6-4~~ 5-5	~~9-3~~ 8-2	~~11-9~~ 10-4	~~14-1~~ 12-3	~~16-6~~ 14-6
	Southern Pine	#3	~~5-4~~ 4-8	~~7-11~~ 6-11	~~10-1~~ 8-9	~~11-11~~ 10-7	~~14-3~~ 12-6	~~4-9~~ 4-2	~~7-1~~ 6-2	~~9-0~~ 7-10	~~10-8~~ 9-6	~~12-8~~ 11-2
	Spruce-Pine-Fir	SS	7-4	11-7	14-9	18-0	20-11	7-1	10-5	13-2	16-1	18-8
	Spruce-Pine-Fir	#1	6-8	9-9	12-4	15-1	17-6	5-11	8-8	11-0	13-6	15-7
	Spruce-Pine-Fir	#2	6-8	9-9	12-4	15-1	17-6	5-11	8-8	11-0	13-6	15-7
	Spruce-Pine-Fir	#3	5-0	7-4	9-4	11-5	13-2	4-6	6-7	8-4	10-2	11-10

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.9 N/m^2

134. Table 2308.10.3(4), "Rafter Spans for Common Lumber Species," of Paragraph 2308.10.3, "Rafter Spans," of Subsection 2308.10, "Roof and Ceiling Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.10.3(4)
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Ground Snow Load = 50 pounds per square foot, Ceiling Not Attached to Rafters, L/Δ = 180)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	8-5	13-3	17-6	22-4	26-0	8-5	13-3	17-0	20-9	24-10
	Douglas Fir-Larch	#1	8-2	12-0	15-3	18-7	21-7	7-7	11-2	14-1	17-3	20-0
	Douglas Fir-Larch	#2	7-8	11-3	14-3	17-5	20-2	7-1	10-5	13-2	16-1	18-8
	Douglas Fir-Larch	#3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Hem-Fir	SS	8-0	12-6	16-6	21-1	25-6	8-0	12-6	16-6	20-4	23-7
	Hem-Fir	#1	7-10	11-9	14-10	18-1	21-0	7-5	10-10	13-9	16-9	19-5
	Hem-Fir	#2	7-5	11-1	14-0	17-2	19-11	7-0	10-3	13-0	15-10	18-5
	Hem-Fir	#3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Southern Pine	SS	8-4	~~13-0~~ 13-1	17-2	21-11	26-0	8-4	~~13-0~~ 13-1	17-2	~~21-11~~ 21-5	~~26-0~~ 25-3
	Southern Pine	#1	~~8-2~~ 8-0	~~12-10~~ 12-3	~~16-10~~ 15-6	~~20-3~~ 18-2	~~24-1~~ 21-7	~~8-2~~ 7-7	~~12-6~~ 11-4	~~15-9~~ 14-5	~~18-9~~ 16-10	~~22-4~~ 20-0
	Southern Pine	#2	~~8-0~~ 7-0	~~11-9~~ 10-6	~~15-3~~ 13-4	~~18-2~~ 15-10	~~21-3~~ 18-8	~~7-3~~ 6-6	~~10-11~~ 9-9	~~14-1~~ 12-4	~~16-10~~ 14-8	~~19-9~~ 17-3
	Southern Pine	#3	~~6-2~~ 5-5	~~9-2~~ 8-0	~~11-8~~ 10-1	~~13-9~~ 12-3	~~16-4~~ 13-6	~~5-9~~ 5-0	~~8-5~~ 7-5	~~10-9~~ 9-4	~~12-9~~ 11-4	~~15-2~~ 13-5
	Spruce-Pine-Fir	SS	7-10	12-3	16-2	20-8	24-1	7-10	12-3	15-9	19-3	22-4
	Spruce-Pine-Fir	#1	7-8	11-3	14-3	17-5	20-2	7-1	10-5	13-2	16-1	18-8
	Spruce-Pine-Fir	#2	7-8	11-3	14-3	17-5	20-2	7-1	10-5	13-2	16-1	18-8
	Spruce-Pine-Fir	#3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
16	Douglas Fir-Larch	SS	7-8	12-1	15-10	19-5	22-6	7-8	11-7	14-8	17-11	20-10
	Douglas Fir-Larch	#1	7-1	10-5	13-2	16-1	18-8	6-7	9-8	12-2	14-11	17-3
	Douglas Fir-Larch	#2	6-8	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2
	Douglas Fir-Larch	#3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-6	12-3
	Hem-Fir	SS	7-3	11-5	15-0	19-1	22-1	7-3	11-5	14-5	17-8	20-5
	Hem-Fir	#1	6-11	10-2	12-10	15-8	18-2	6-5	9-5	11-11	14-6	16-10
	Hem-Fir	#2	6-7	9-7	12-2	14-10	17-3	6-1	8-11	11-3	13-9	15-11
	Hem-Fir	#3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-6	12-3
	Southern Pine	SS	7-6	11-10	15-7	19-11	~~24-2~~ 23-7	7-6	11-10	15-7	~~19-11~~ 18-6	~~23-10~~ 21-10
	Southern Pine	#1	~~7-5~~ 7-1	~~11-7~~ 10-7	~~14-9~~ 13-5	~~17-6~~ 15-9	~~20-11~~ 18-8	~~7-4~~ 6-7	~~10-10~~ 9-10	~~13-8~~ 12-5	~~16-2~~ 14-7	~~19-4~~ 17-3
	Southern Pine	#2	~~7-1~~ 6-1	~~10-2~~ 9-2	~~13-3~~ 11-7	~~15-9~~ 13-9	~~18-8~~ 16-2	~~6-7~~ 5-8	~~9-5~~ 8-5	~~12-2~~ 10-9	~~14-7~~ 12-9	~~17-4~~ 15-0
	Southern Pine	#3	~~5-4~~ 4-8	~~7-11~~ 6-11	~~10-4~~ 8-9	~~11-11~~ 10-7	~~14-2~~ 12-6	~~4-11~~ 4-4	~~7-4~~ 6-5	~~9-4~~ 8-1	~~11-8~~ 9-10	~~13-9~~ 11-7
	Spruce-Pine-Fir	SS	7-1	11-2	14-8	18-0	20-11	7-1	10-9	13-8	16-8	19-4
	Spruce-Pine-Fir	#1	6-8	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2
	Spruce-Pine-Fir	#2	6-8	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2
	Spruce-Pine-Fir	#3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-6	12-3

(continued)

TABLE 2308.10.3(4)—continued
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Ground Snow Load = 50 pounds per square foot, Ceiling Not Attached to Rafters, L/Δ = 180)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Douglas Fir-Larch	SS	7-3	11-4	14-6	17-8	20-6	7-3	10-7	13-5	16-5	19-0
	Douglas Fir-Larch	#1	6-6	9-6	12-0	14-8	17-1	6-0	8-10	11-2	13-7	15-9
	Douglas Fir-Larch	#2	6-1	8-11	11-3	13-9	15-11	5-7	8-3	10-5	12-9	14-9
	Douglas Fir-Larch	#3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2
	Hem-Fir	SS	6-10	10-9	14-2	17-5	20-2	6-10	10-5	13-2	16-1	18-8
	Hem-Fir	#1	6-4	9-3	11-9	14-4	16-7	5-10	8-7	10-10	13-3	15-5
	Hem-Fir	#2	6-0	8-9	11-1	13-7	15-9	5-7	8-1	10-3	12-7	14-7
	Hem-Fir	#3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2
	Southern Pine	SS	7-1	11-2	14-8	~~18-9~~ 18-3	~~22-10~~ 21-7	7-1	11-2	~~14-8~~ 14-2	~~18-7~~ 16-11	~~21-9~~ 20-0
	Southern Pine	#1	~~7-0~~ 6-6	~~10-8~~ 9-8	~~13-5~~ 12-3	~~16-9~~ 14-4	~~19-1~~ 17-1	~~6-8~~ 6-0	~~9-11~~ 9-0	~~12-5~~ 11-4	~~14-10~~ 13-4	~~17-8~~ 15-9
	Southern Pine	#2	~~6-6~~ 5-7	~~9-4~~ 8-4	~~12-0~~ 10-7	~~14-4~~ 12-6	~~16-10~~ 14-9	~~6-0~~ 5-2	~~8-8~~ 7-9	~~11-2~~ 9-9	~~13-4~~ 11-7	~~15-7~~ 13-8
	Southern Pine	#3	~~4-11~~ 4-3	~~7-3~~ 6-4	~~9-2~~ 8-0	~~10-10~~ 9-8	~~12-11~~ 11-5	~~4-6~~ 4-0	~~6-8~~ 5-10	~~8-6~~ 7-4	~~10-1~~ 8-11	~~12-0~~ 10-7
	Spruce-Pine-Fir	SS	6-8	10-6	13-5	16-5	19-1	6-8	9-10	12-5	15-3	17-8
	Spruce-Pine-Fir	#1	6-1	8-11	11-3	13-9	15-11	5-7	8-3	10-5	12-9	14-9
	Spruce-Pine-Fir	#2	6-1	8-11	11-3	13-9	15-11	5-7	8-3	10-5	12-9	14-9
	Spruce-Pine-Fir	#3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2
24	Douglas Fir-Larch	SS	6-8	10-3	13-0	15-10	18-4	6-6	9-6	12-0	14-8	17-0
	Douglas Fir-Larch	#1	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Douglas Fir-Larch	#2	5-5	7-11	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2
	Douglas Fir-Larch	#3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0
	Hem-Fir	SS	6-4	9-11	12-9	15-7	18-0	6-4	9-4	11-9	14-5	16-8
	Hem-Fir	#1	5-8	8-3	10-6	12-10	14-10	5-3	7-8	9-9	11-10	13-9
	Hem-Fir	#2	5-4	7-10	9-11	12-1	14-1	4-11	7-3	9-2	11-3	13-0
	Hem-Fir	#3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0
	Southern Pine	SS	6-7	10-4	13-8	~~17-3~~ 16-4	~~21-0~~ 19-3	6-7	~~10-4~~ 10-0	~~13-8~~ 12-8	~~16-7~~ 15-2	~~19-5~~ 17-10
	Southern Pine	#1	~~6-5~~ 5-10	~~9-7~~ 8-8	~~12-0~~ 11-0	~~14-4~~ 12-10	~~17-1~~ 15-3	~~6-0~~ 5-5	~~8-10~~ 8-0	~~11-2~~ 10-2	~~13-3~~ 11-11	~~15-9~~ 14-1
	Southern Pine	#2	~~5-10~~ 5-0	~~8-4~~ 7-5	~~10-9~~ 9-5	~~12-10~~ 11-3	~~15-1~~ 13-2	~~5-5~~ 4-7	~~7-9~~ 6-11	~~10-0~~ 8-9	~~11-11~~ 10-5	~~13-11~~ 12-3
	Southern Pine	#3	~~4-4~~ 3-10	~~6-5~~ 5-8	~~8-3~~ 7-1	~~9-9~~ 8-8	~~11-7~~ 10-3	~~4-1~~ 3-6	~~6-0~~ 5-3	~~7-7~~ 6-7	~~9-0~~ 8-0	~~10-8~~ 9-6
	Spruce-Pine-Fir	SS	6-2	9-6	12-0	14-8	17-1	6-0	8-10	11-2	13-7	15-9
	Spruce-Pine-Fir	#1	5-5	7-11	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2
	Spruce-Pine-Fir	#2	5-5	7-11	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2
	Spruce-Pine-Fir	#3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.9 N/m²

135. Table 2308.10.3(5), "Rafter Spans for Common Lumber Species," of Paragraph 2308.10.3, "Rafter Spans," of Subsection 2308.10, "Roof and Ceiling Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.10.3(5)
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Ground Snow Load = 30 pounds per square foot, Ceiling Attached to Rafters, L/Δ = 240)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	9-1	14-4	18-10	24-1	26-0	9-1	14-4	18-10	24-1	26-0
	Douglas Fir-Larch	#1	8-9	13-9	18-2	22-9	26-0	8-9	13-2	16-8	20-4	23-7
	Douglas Fir-Larch	#2	8-7	13-6	17-5	21-4	24-8	8-5	12-4	15-7	19-1	22-1
	Douglas Fir-Larch	#3	7-1	10-5	13-2	16-1	18-8	6-4	9-4	11-9	14-5	16-8
	Hem-Fir	SS	8-7	13-6	17-10	22-9	26-0	8-7	13-6	17-10	22-9	26-0
	Hem-Fir	#1	8-5	13-3	17-5	22-2	25-9	8-5	12-10	16-3	19-10	23-0
	Hem-Fir	#2	8-0	12-7	16-7	21-0	24-4	8-0	12-2	15-4	18-9	21-9
	Hem-Fir	#3	7-1	10-5	13-2	16-1	18-8	6-4	9-4	11-9	14-5	16-8
	Southern Pine	SS	8-11	14-1	18-6	23-8	26-0	8-11	14-1	18-6	23-8	26-0
	Southern Pine	#1	~~8-9~~ 8-7	~~13-9~~ 13-6	~~18-2~~ 17-10	~~23-2~~ 22-3	26-0	~~8-9~~ 8-7	~~13-9~~ 13-5	~~18-2~~ 17-0	~~22-2~~ 19-11	~~26-0~~ 23-7
	Southern Pine	#2	~~8-7~~ 8-3	~~13-6~~ 12-11	~~17-10~~ 16-4	~~22-3~~ 19-5	~~26-0~~ 22-10	~~8-7~~ 7-8	~~12-11~~ 11-7	~~16-8~~ 14-8	~~19-11~~ 17-4	~~23-4~~ 20-5
	Southern Pine	#3	~~7-2~~ 6-7	~~11-3~~ 9-9	~~14-3~~ 12-4	~~16-10~~ 15-0	~~20-0~~ 17-9	~~6-9~~ 5-11	~~10-0~~ 8-9	~~12-9~~ 11-0	~~15-1~~ 13-5	~~17-11~~ 15-10
	Spruce-Pine-Fir	SS	8-5	13-3	17-5	22-3	26-0	8-5	13-3	17-5	22-3	26-0
	Spruce-Pine-Fir	#1	8-3	12-11	17-0	21-4	24-8	8-3	12-4	15-7	19-1	22-1
	Spruce-Pine-Fir	#2	8-3	12-11	17-0	21-4	24-8	8-3	12-4	15-7	19-1	22-1
	Spruce-Pine-Fir	#3	7-1	10-5	13-2	16-1	18-8	6-4	9-4	11-9	14-5	16-8
16	Douglas Fir-Larch	SS	8-3	13-0	17-2	21-10	26-0	8-3	13-0	17-2	21-3	24-8
	Douglas Fir-Larch	#1	8-0	12-6	16-2	19-9	22-10	7-10	11-5	14-5	17-8	20-5
	Douglas Fir-Larch	#2	7-10	11-11	15-1	18-5	21-5	7-3	10-8	13-6	16-6	19-2
	Douglas Fir-Larch	#3	6-2	9-0	11-5	13-11	16-2	5-6	8-1	10-3	12-6	14-6
	Hem-Fir	SS	7-10	12-3	16-2	20-8	25-1	7-10	12-3	16-2	20-8	24-2
	Hem-Fir	#1	7-8	12-0	15-9	19-3	22-3	7-7	11-1	14-1	17-2	19-11
	Hem-Fir	#2	7-3	11-5	14-11	18-2	21-1	7-2	10-6	13-4	16-3	18-10
	Hem-Fir	#3	6-2	9-0	11-5	13-11	16-2	5-6	8-1	10-3	12-6	14-6
	Southern Pine	SS	8-1	12-9	16-10	21-6	26-0	8-1	12-9	16-10	21-6	~~26-0~~ 25-11
	Southern Pine	#1	~~8-0~~ 7-10	~~12-6~~ 12-3	~~16-6~~ 16-2	~~21-1~~ 19-3	~~25-7~~ 22-10	~~8-0~~ 7-10	~~12-6~~ 11-7	~~16-2~~ 14-9	~~19-2~~ 17-3	~~22-10~~ 20-5
	Southern Pine	#2	~~7-10~~ 7-6	~~12-3~~ 11-2	~~16-2~~ 14-2	19-3 ~~22-7~~ 16-10	~~22-7~~ 19-10	~~7-10~~ 6-8	~~11-2~~ 10-0	~~14-5~~ 12-8	~~17-3~~ 15-1	~~20-2~~ 17-9
	Southern Pine	#3	~~6-7~~ 5-9	~~9-8~~ 8-6	~~12-4~~ 10-8	~~14-9~~ 12-0	~~17-4~~ 15-4	~~6-10~~ 5-3	~~8-8~~ 7-7	~~11-0~~ 9-7	~~13-0~~ 11-7	~~15-6~~ 13-9
	Spruce-Pine-Fir	SS	7-8	12-0	15-10	20-2	24-7	7-8	12-0	15-10	19-9	23-10
	Spruce-Pine-Fir	#1	7-6	11-9	15-1	18-5	21-5	7-3	10-8	13-6	16-6	19-2
	Spruce-Pine-Fir	#2	7-6	11-9	15-1	18-5	21-5	7-3	10-8	13-6	16-6	19-2
	Spruce-Pine-Fir	#3	6-2	9-0	11-5	13-11	16-2	5-6	8-1	10-3	12-6	14-6

(continued)

TABLE 2308.10.3(5)—continued
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Ground Snow Load = 30 pounds per square foot, Ceiling Attached to Rafters, L/Δ = 240)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Douglas Fir-Larch	SS	7-9	12-3	16-1	20-7	25-0	7-9	12-3	15-10	19-5	22-6
	Douglas Fir-Larch	#1	7-6	11-8	14-9	18-0	20-11	7-1	10-5	13-2	16-1	18-8
	Douglas Fir-Larch	#2	7-4	10-11	13-9	16-10	19-6	6-8	9-9	12-4	15-1	17-6
	Douglas Fir-Larch	#3	5-7	8-3	10-5	12-9	14-9	5-0	7-4	9-4	11-5	13-2
	Hem-Fir	SS	7-4	11-7	15-3	19-3	23-7	7-4	11-7	15-3	19-1	22-1
	Hem-Fir	#1	7-2	11-4	14-4	17-7	20-4	6-11	10-2	12-10	15-8	18-2
	Hem-Fir	#2	6-10	10-9	13-7	16-7	19-3	6-7	9-7	12-2	14-10	17-3
	Hem-Fir	#3	5-7	8-3	10-5	12-9	14-9	5-0	7-4	9-4	11-5	13-2
	Southern Pine	SS	7-8	12-0	15-10	20-2	24-7	7-8	12-0	15-10	~~20-2~~ 20-0	~~24-7~~ 23-7
	Southern Pine	#1	~~7-6~~ 7-4	~~11-9~~ 11-7	~~15-6~~ 15-1	~~19-7~~ 17-7	~~23-4~~ 20-11	~~7-6~~ 7-1	~~11-9~~ 10-7	~~14-9~~ 13-5	~~17-6~~ 15-9	~~20-11~~ 18-8
	Southern Pine	#2	~~7-4~~ 6-10	~~11-5~~ 10-2	~~14-9~~ 12-11	~~17-2~~ 15-4	~~20-7~~ 18-1	~~7-4~~ 6-1	~~10-2~~ 9-2	~~13-2~~ 11-7	~~15-9~~ 13-9	~~18-5~~ 16-2
	Southern Pine	#3	~~6-8~~ 5-3	~~8-10~~ 7-9	~~11-3~~ 9-9	~~13-4~~ 11-10	~~15-10~~ 14-0	~~5-4~~ 4-8	~~7-11~~ 6-11	~~10-1~~ 8-9	~~11-11~~ 10-7	~~14-3~~ 12-6
	Spruce-Pine-Fir	SS	7-2	11-4	14-11	19-0	23-1	7-2	11-4	14-9	18-0	20-11
	Spruce-Pine-Fir	#1	7-0	10-11	13-9	16-10	19-6	6-8	9-9	12-4	15-1	17-6
	Spruce-Pine-Fir	#2	7-0	10-11	13-9	16-10	19-6	6-8	9-9	12-4	15-1	17-6
	Spruce-Pine-Fir	#3	5-7	8-3	10-5	12-9	14-9	5-0	7-4	9-4	11-5	13-2
24	Douglas Fir-Larch	SS	7-3	11-4	15-0	19-1	22-6	7-3	11-3	14-2	17-4	20-1
	Douglas Fir-Larch	#1	7-0	10-5	13-2	16-1	18-8	6-4	9-4	11-9	14-5	16-8
	Douglas Fir-Larch	#2	6-8	9-9	12-4	15-1	17-6	5-11	8-8	11-0	13-6	15-7
	Douglas Fir-Larch	#3	5-0	7-4	9-4	11-5	13-2	4-6	6-7	8-4	10-2	11-10
	Hem-Fir	SS	6-10	10-9	14-2	18-0	21-11	6-10	10-9	13-11	17-0	19-9
	Hem-Fir	#1	6-8	10-2	12-10	15-8	18-2	6-2	9-1	11-6	14-0	16-5
	Hem-Fir	#2	6-4	9-7	12-2	14-10	17-3	5-10	8-7	10-10	13-3	15-5
	Hem-Fir	#3	5-0	7-4	9-4	11-5	13-2	4-6	6-7	8-4	10-2	11-10
	Southern Pine	SS	7-1	11-2	14-8	18-9	22-10	7-1	11-2	14-8	~~18-9~~ 17-11	~~22-10~~ 21-2
	Southern Pine	#1	~~7-0~~ 6-10	~~10-11~~ 10-7	~~14-5~~ 13-5	~~17-6~~ 15-9	~~20-11~~ 18-8	~~7-0~~ 6-4	~~10-6~~ 9-6	~~13-2~~ 12-0	~~15-8~~ 14-1	~~18-8~~ 16-8
	Southern Pine	#2	~~6-10~~ 6-1	~~10-2~~ 9-2	~~13-2~~ 11-7	~~15-9~~ 13-9	~~18-5~~ 16-2	~~6-4~~ 5-5	~~9-2~~ 8-2	~~11-9~~ 10-4	~~14-1~~ 12-3	~~16-6~~ 14-6
	Southern Pine	#3	~~5-4~~ 4-8	~~7-11~~ 6-11	~~10-1~~ 8-9	~~11-11~~ 10-7	~~14-3~~ 12-6	~~4-9~~ 4-2	~~7-1~~ 6-2	~~9-0~~ 7-10	~~10-8~~ 9-6	~~12-8~~ 11-2
	Spruce-Pine-Fir	SS	6-8	10-6	13-10	17-8	20-11	6-8	10-5	13-2	16-1	18-8
	Spruce-Pine-Fir	#1	6-6	9-9	12-4	15-1	17-6	5-11	8-8	11-0	13-6	15-7
	Spruce-Pine-Fir	#2	6-6	9-9	12-4	15-1	17-6	5-11	8-8	11-0	13-6	15-7
	Spruce-Pine-Fir	#3	5-0	7-4	9-4	11-5	13-2	4-6	6-7	8-4	10-2	11-10

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.9 N/m².

136. Table 2308.10.3(6), "Rafter Spans for Common Lumber Species," of Paragraph 2308.10.3, "Rafter Spans," of Subsection 2308.10, "Roof and Ceiling Framing," of Section 2308, "Conventional Light-Frame Construction," of Chapter 23, "Wood," of the 2012 International Building Code is amended to read as follows:

TABLE 2308.10.3(6)
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Ground Snow Load = 50 pounds per square foot, Ceiling Attached to Rafters, L/Δ = 240)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Douglas Fir-Larch	SS	7-8	12-1	15-11	20-3	24-8	7-8	12-1	15-11	20-3	24-0
	Douglas Fir-Larch	#1	7-5	11-7	15-3	18-7	21-7	7-5	11-2	14-1	17-3	20-0
	Douglas Fir-Larch	#2	7-3	11-3	14-3	17-5	20-2	7-1	10-5	13-2	16-1	18-8
	Douglas Fir-Larch	#3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Hem-Fir	SS	7-3	11-5	15-0	19-2	23-4	7-3	11-5	15-0	19-2	23-4
	Hem-Fir	#1	7-1	11-2	14-8	18-1	21-0	7-1	10-10	13-9	16-9	19-5
	Hem-Fir	#2	6-9	10-8	14-0	17-2	19-11	6-9	10-3	13-0	15-10	18-5
	Hem-Fir	#3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Southern Pine	SS	7-6	11-0	15-7	19-11	24-3	7-6	11-10	15-7	19-11	24-3
	Southern Pine	#1	~~7-5~~ 7-3	~~11-7~~ 11-5	~~15-4~~ 15-0	~~19-7~~ 18-2	~~23-9~~ 21-7	~~7-3~~ 7-3	~~11-7~~ 11-4	~~15-4~~ 14-5	~~18-9~~ 16-10	~~22-4~~ 20-0
	Southern Pine	#2	~~7-3~~ 6-11	~~11-5~~ 10-6	~~15-0~~ 13-4	~~18-2~~ 15-10	~~21-3~~ 18-8	~~7-3~~ 6-6	~~10-11~~ 9-9	~~14-1~~ 12-4	~~16-10~~ 14-8	~~19-9~~ 17-3
	Southern Pine	#3	~~6-2~~ 5-5	~~9-2~~ 8-0	~~11-8~~ 10-1	~~13-9~~ 12-3	~~16-4~~ 14-6	~~5-9~~ 5-0	~~8-5~~ 7-5	~~10-9~~ 9-4	~~12-8~~ 11-4	~~15-2~~ 13-5
	Spruce-Pine-Fir	SS	7-1	11-2	14-8	18-9	22-10	7-1	11-2	14-8	18-9	22-4
	Spruce-Pine-Fir	#1	6-11	10-11	14-3	17-5	20-2	6-11	10-5	13-2	16-1	18-8
	Spruce-Pine-Fir	#2	6-11	10-11	14-3	17-5	20-2	6-11	10-5	13-2	16-1	18-8
	Spruce-Pine-Fir	#3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
16	Douglas Fir-Larch	SS	7-0	11-0	14-5	18-5	22-5	7-0	11-0	14-5	17-11	20-10
	Douglas Fir-Larch	#1	6-9	10-5	13-2	16-1	18-8	6-7	9-8	12-2	14-11	17-3
	Douglas Fir-Larch	#2	6-7	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2
	Douglas Fir-Larch	#3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-6	12-3
	Hem-Fir	SS	6-7	10-4	13-8	17-5	21-2	6-7	10-4	13-8	17-5	20-5
	Hem-Fir	#1	6-5	10-2	12-10	15-8	18-2	6-5	9-5	11-11	14-6	16-10
	Hem-Fir	#2	6-2	9-7	12-2	14-10	17-3	6-1	8-11	11-3	13-9	15-11
	Hem-Fir	#3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-6	12-3
	Southern Pine	SS	6-10	10-9	14-2	18-1	22-0	6-10	10-9	14-2	18-1	~~22-0~~ 21-10
	Southern Pine	#1	~~6-9~~ 6-7	~~10-7~~ 10-4	~~13-11~~ 13-5	~~17-6~~ 15-9	~~20-11~~ 18-8	~~6-9~~ 6-7	~~10-7~~ 9-10	~~13-8~~ 12-5	~~16-2~~ 14-7	~~19-4~~ 17-3
	Southern Pine	#2	~~6-7~~ 6-1	~~10-2~~ 9-2	~~13-2~~ 11-7	~~15-9~~ 13-9	~~18-5~~ 16-2	~~6-7~~ 5-8	~~9-5~~ 8-5	~~12-2~~ 10-9	~~14-7~~ 12-9	~~17-1~~ 15-0
	Southern Pine	#3	~~5-4~~ 4-8	~~7-11~~ 6-11	~~10-3~~ 8-9	~~11-11~~ 10-7	~~14-2~~ 12-6	~~4-11~~ 4-4	~~7-4~~ 6-5	~~9-4~~ 8-1	~~11-6~~ 9-10	~~13-4~~ 11-7
	Spruce-Pine-Fir	SS	6-5	10-2	13-4	17-0	20-9	6-5	10-2	13-4	16-8	19-4
	Spruce-Pine-Fir	#1	6-4	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2
	Spruce-Pine-Fir	#2	6-4	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2
	Spruce-Pine-Fir	#3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-6	12-3

(continued)

TABLE 2308.10.3(6)—continued
RAFTER SPANS FOR COMMON LUMBER SPECIES
(Ground Snow Load = 50 pounds per square foot, Ceiling Attached to Rafters, L/Δ = 240)

RAFTER SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 pounds per square foot					DEAD LOAD = 20 pounds per square foot				
			2 × 4	2 × 6	2 × 8	2 × 10	2 × 12	2 × 4	2 × 6	2 × 8	2 × 10	2 × 12
			Maximum rafter spans									
			(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
19.2	Douglas Fir-Larch	SS	6-7	10-4	13-7	17-4	20-6	6-7	10-4	13-5	16-5	19-0
	Douglas Fir-Larch	#1	6-4	9-6	12-0	14-8	17-1	6-0	8-10	11-2	13-7	15-9
	Douglas Fir-Larch	#2	6-1	8-11	11-3	13-9	15-11	5-7	8-3	10-5	12-9	14-9
	Douglas Fir-Larch	#3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2
	Hem-Fir	SS	6-2	9-9	12-10	16-5	19-11	6-2	9-9	12-10	16-1	18-8
	Hem-Fir	#1	6-1	9-3	11-9	14-4	16-7	5-10	8-7	10-10	13-3	15-5
	Hem-Fir	#2	5-9	8-9	11-1	13-7	15-9	5-7	8-1	10-3	12-7	14-7
	Hem-Fir	#3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2
	Southern Pine	SS	6-5	10-2	13-4	17-0	20-9	6-5	10-2	13-4	~~17-0~~ 16-11	~~20-9~~ 20-0
	Southern Pine	#1	~~6-4~~ 6-2	~~9-11~~ 9-8	~~13-1~~ 12-3	~~16-9~~ 14-4	~~19-1~~ 17-1	~~6-4~~ 6-0	~~9-11~~ 9-9	~~12-5~~ 11-4	~~14-10~~ 13-4	~~17-8~~ 15-9
	Southern Pine	#2	~~6-2~~ 5-7	~~9-4~~ 8-4	~~12-0~~ 10-7	~~14-4~~ 12-6	~~16-10~~ 14-9	~~6-0~~ 5-2	~~8-8~~ 7-9	~~11-2~~ 9-9	~~13-4~~ 11-7	~~15-7~~ 13-8
	Southern Pine	#3	~~4-11~~ 4-3	~~7-3~~ 6-4	~~9-3~~ 8-0	~~10-10~~ 9-8	~~12-11~~ 11-5	~~4-6~~ 4-0	~~6-8~~ 5-10	~~8-6~~ 7-4	~~10-1~~ 8-11	~~12-0~~ 10-7
	Spruce-Pine-Fir	SS	6-1	9-6	12-7	16-0	19-1	6-1	9-6	12-5	15-3	17-8
	Spruce-Pine-Fir	#1	5-11	8-11	11-3	13-9	15-11	5-7	8-3	10-5	12-9	14-9
	Spruce-Pine-Fir	#2	5-11	8-11	11-3	13-9	15-11	5-7	8-3	10-5	12-9	14-9
	Spruce-Pine-Fir	#3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2
24	Douglas Fir-Larch	SS	6-1	9-7	12-7	15-10	18-4	6-1	9-6	12-0	14-8	17-0
	Douglas Fir-Larch	#1	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Douglas Fir-Larch	#2	5-5	7-11	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2
	Douglas Fir-Larch	#3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0
	Hem-Fir	SS	5-9	9-1	11-11	15-12	18-0	5-9	9-1	11-9	14-5	16-8
	Hem-Fir	#1	5-8	8-3	10-6	12-10	14-10	5-3	7-8	9-9	11-10	13-9
	Hem-Fir	#2	5-4	7-10	9-11	12-1	14-1	4-11	7-3	9-2	11-3	13-0
	Hem-Fir	#3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0
	Southern Pine	SS	6-0	9-5	12-5	15-10	19-3	6-0	9-5	12-5	~~15-10~~ 15-2	~~19-3~~ 17-10
	Southern Pine	#1	~~5-10~~ 5-9	~~9-3~~ 8-8	~~12-0~~ 11-0	~~14-4~~ 12-10	~~17-1~~ 15-3	~~5-10~~ 5-5	~~8-10~~ 8-0	~~11-2~~ 10-2	~~13-3~~ 11-11	~~15-9~~ 14-1
	Southern Pine	#2	~~5-9~~ 5-0	~~8-4~~ 7-5	~~10-9~~ 9-5	~~12-10~~ 11-3	~~15-1~~ 13-2	~~5-5~~ 4-7	~~7-9~~ 6-11	~~10-0~~ 8-9	~~11-11~~ 10-5	~~13-11~~ 12-3
	Southern Pine	#3	~~4-4~~ 3-10	~~6-8~~ 5-8	~~8-3~~ 7-1	~~9-9~~ 8-5	~~11-7~~ 10-3	~~4-1~~ 3-6	~~6-0~~ 5-3	~~7-7~~ 6-7	~~9-0~~ 8-0	~~10-8~~ 9-6
	Spruce-Pine-Fir	SS	5-8	8-10	11-8	14-8	17-1	5-8	8-10	11-2	13-7	15-9
	Spruce-Pine-Fir	#1	5-5	7-11	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2
	Spruce-Pine-Fir	#2	5-5	7-11	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2
	Spruce-Pine-Fir	#3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 47.9 N/m^2.

137. Subsection 2503.1, "Inspection," of Section 2503, "Inspection," of Chapter 25, "Gypsum Board and Plaster," of the 2012 International Building Code is amended to read as follows:

"**2503.1 Inspection.** Lath and gypsum board shall be inspected in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* [~~Section 110.3.5~~]."

138. Subsection [P] 2901.1, "Scope," of Section 2901, "General," of Chapter 29, "Plumbing Systems," of the 2012 International Building Code is amended to read as follows:

"**[P] 2901.1 Scope.** The provisions of this chapter and the Dallas [~~International~~] *Plumbing Code* shall govern the erection, installation, *alteration*, repairs, relocation, replacement, *addition* to, use or maintenance of plumbing equipment and systems. Toilet and bathing rooms shall be constructed in accordance with Section 1210. Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the Dallas [~~International~~] *Plumbing Code*. Private sewage disposal systems shall conform to the *International Private Sewage Disposal Code*. The provisions of this chapter are meant to work in coordination with the provisions of Chapter 4 of the *Dallas Plumbing Code*. In the event of a conflict between this chapter and Chapter 4 of the *Dallas Plumbing Code*, the *building official* shall determine which provision applies."

139. Subsection [P] 2902.1, "Minimum Number of Fixtures," of Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2012 International Building Code is amended to read as follows:

"**[P] 2902.1 Minimum number of fixtures.** Plumbing fixtures shall be provided for the type of occupancy and in the minimum number as follows:

1. Assembly occupancies: At least one drinking fountain must be provided at each floor level in an *approved* location.

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

2. Groups A, B, F, H, I, M and S occupancies: Buildings, 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.

3. 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.

Exception: 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.

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 Family or assisted-use toilet and bath fixtures. Fixtures located within family or assisted-use toilet and bathing rooms required by Section 1109.2.1 are permitted to be included in the number of required fixtures for either the male or female occupants in assembly and mercantile occupancies.

2902.1.3 Additional fixtures for food preparation facilities. In addition to the fixtures required in this chapter, all food service facilities must be provided with additional fixtures as required in this section.

2902.1.3.1 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.

2902.1.3.2 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."

140. Footnote f of [P] Table 2902.1, "Minimum Number of Plumbing Fixtures," of Subsection [P] 2902.1, "Minimum Number of Fixtures," of Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2012 International Building Code is deleted and replaced with a new Footnote f to read as follows:

"f. Drinking fountains are not required in M occupancies with an occupant load of 100 or less, B occupancies with an occupant load or 25 or less or for dining and drinking establishments."

141. Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2012 International Building Code is amended by adding a new Subsection 2902.6, "Finish Material," to read as follows:

"**2902.6 Finish material.** Finish materials must comply with Section 1210."

142. Subsection 3001.2, "Referenced Standards," of Section 3001, "General," of Chapter 30, "Elevators and Conveying Systems," of the 2012 International Building Code is amended to read as follows:

"**3001.2 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 ASME A17.1/CSA B44, ASME A90.1, ASME B20.1, ALI ALCTV, and ASCE 24 for construction in *flood hazard areas* established in Section 1612.3.

Exception: The appendices of ASME A17.1—2010 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."

143. Subsection 3001.3, "Accessibility," of Section 3001, "General," of Chapter 30, "Elevators and Conveying Systems," of the 2012 International Building Code is amended to read as follows:

"**3001.3 Accessibility.** Passenger elevators required to be accessible or to serve as part of an *accessible means of egress* shall comply with Sections 1107 and 1109.7.

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."

144. Section 3006, "Machine Rooms," of Chapter 30, "Elevators and Conveying Systems," of the 2012 International Building Code is amended to read as follows:

"**SECTION 3006**
MACHINE ROOMS

3006.1 General [~~Access~~]. Elevator machine rooms must be provided and must be dedicated to elevator equipment only. An *approved* means of access shall be provided to elevator machine rooms and overhead machinery spaces.

3006.2 Venting. Elevator machine rooms that contain solid-state equipment for elevator operation shall be provided with an independent *ventilation* or air-conditioning system to protect against the overheating of the electrical equipment. The system shall be capable of maintaining temperatures within the range established for the elevator equipment.

3006.3 Pressurization. The elevator machine room serving a pressurized elevator hoistway shall be pressurized upon activation of a *heat or smoke detector* located in the elevator machine room.

3006.4 Machine rooms and machinery spaces. Elevator machine rooms and machinery spaces shall be enclosed with *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. 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. Storage is not allowed within the elevator machine room. *Approved* signage must be provided at each entry door to the elevator machine room stating: "Elevator Machinery—No Storage Allowed."

[~~**Exceptions:**~~

~~1. Where machine rooms and machinery 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. In buildings four *stories* or less above *grade plane* where machine room and machinery spaces do not abut and have no openings to the hoistway enclosure they serve, the machine room and machinery spaces are not required to be fire-resistance rated.~~]

3006.5 Shunt trip. Where elevator hoistways or elevator machine rooms containing elevator control equipment are protected with automatic sprinklers, a means installed in accordance with NFPA 72, Section 6.16.4, Elevator Shutdown, shall be provided to disconnect automatically the main line power supply to the affected elevator prior to the application of water. This means shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply.

3006.5.1 Elevator equipment protection. In accordance with NFPA 13, automatic sprinklers are not required in elevator machine rooms, elevator machine spaces and elevator hoistways of elevators serving traction elevators. 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.

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

3006.6 Plumbing systems. Plumbing systems shall not be located in elevator equipment rooms."

145. Subsection 3007.1, "General," of Section 3007, "Fire Service Access Elevator," of Chapter 30, "Elevators and Conveying Systems," of the 2012 International Building Code is amended to read as follows:

"**3007.1 General.** Where required by Section 403.6.1, every floor of the building shall be served by fire service access elevators complying with Sections 3007.1 through 3007.10. 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 meets this condition."

146. Subsection 3007.7, "Fire Service Access Elevator Lobby," of Section 3007, "Fire Service Access Elevator," of Chapter 30, "Elevators and Conveying Systems," of the 2012 International Building Code is amended to read as follows:

"**3007.7 Fire service access elevator lobby.** The fire service access elevator shall open into a fire service access elevator lobby in accordance with Sections 3007.7.1 through 3007.7.5. 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 open into an elevator lobby in accordance with Section 713.14.1 [~~708.14.1~~].

3007.7.1 Access. The fire service access elevator lobby shall have direct access to an enclosure for an *interior exit stairway*.

3007.7.2 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 3007.7.3.

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

3007.7.3 Lobby doorways. Other than the door to the hoistway, each doorway to a fire service access elevator lobby shall be provided with a ¾-hour *fire door assembly* complying with Section 716.5. The *fire door assembly* shall also comply with the smoke and draft control door assembly requirements of Section 716.5.3.1 with the UL 1784 test conducted without the artificial bottom seal.

3007.7.4 Lobby size. Each enclosed fire service access elevator lobby shall be not less than 150 square feet (14 m^2) in an area with a minimum dimension of 8 feet (2440 mm).

3007.7.5 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 3007.7.5 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 vertical center line of the fire service access elevator symbol shall be centered on the hoistway door frame. Each symbol shall not be less than 78 inches (1981 mm), and not more than 84 inches (2134 mm) [~~inches~~] above the finished floor at the threshold."

147. Subsection 3102.1, "General," of Section 3102, "Membrane Structures," of Chapter 31, "Special Construction," of the 2012 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 and membrane-covered frame 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 *Dallas* [~~*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 or other fabric or membrane structure or portion of a structure intended to be in place temporarily must comply with the provisions of Chapter 39.

3102.1.1 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.

3102.1.2 Permeable covers. 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."

148. Subsection 3102.2, "Definitions," of Section 3102, "Membrane Structures," of Chapter 31, "Special Construction," of the 2012 International Building Code is amended to read as follows:

"**3102.2 Definitions.** The following terms are defined in Chapter 2:

AIR-INFLATED STRUCTURE.

AIR-SUPPORTED STRUCTURE.

Double skin.

Single skin.

CABLE-RESTRAINED, AIR-SUPPORTED STRUCTURE.

MEMBRANE-COVERED CABLE STRUCTURE.

MEMBRANE-COVERED FRAME STRUCTURE.

NONCOMBUSTIBLE MEMBRANE STRUCTURE.

OPEN STRUCTURE.

WEATHERED-MEMBRANE STRUCTURE."

149. Subsection 3102.3, "Type of Construction," of Section 3102, "Membrane Structures," of Chapter 31, "Special Construction," of the 2012 International Building Code is amended by adding a new Paragraph 3102.3.2, "Weather Protection," to read as follows:

"**3102.3.2 Weather protection.** All membrane structures must provide weather protection as required in Sections 1405.2 and 1503.

Exception: Weather protection is not required in occupancies designed as *open structures*."

150. Subsection 3102.3, "Type of Construction," of Section 3102, "Membrane Structures," of Chapter 31, "Special Construction," of the 2012 International Building Code is amended by adding a new Paragraph 3102.3.3, "Weathering," to read as follows:

"**3102.3.3 Weathering.** Testing of membrane materials for compliance with this section's categories of noncombustible and flame-resistant must be performed on *weathered membrane material*."

151. Subsection 3103.1, "General," of Section 3103, "Temporary Structures," of Chapter 31, "Special Construction," of the 2012 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. Tents 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 Permit required. Temporary structures that cover an area greater than 120 square feet (11.16 m^2), including connecting areas or spaces with a common *means of egress* or entrance which 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*."

152. Section 3104, "Pedestrian Walkways and Tunnels," of Chapter 31, "Special Construction," of the 2012 International Building Code is amended by adding a new Subsection 3104.11, "Sprinklers," to read as follows:

"**3104.11 Sprinklers.** Pedestrian walkways and tunnels must be fully sprinklered when connecting to any building exceeding the type of construction fire areas as listed in Table 903.2.13."

153. Section 3109, "Swimming Pool Enclosures and Safety Devices," of Chapter 31, "Special Construction," of the 2012 International Building Code is amended to read as follows:

"**SECTION 3109**
SWIMMING POOL ENCLOSURES AND SAFETY DEVICES

3109.1 General. Swimming pools shall comply with the requirements of Sections 3109.2 through 3109.5 and other applicable sections of this code. This section does not preempt state law. Compliance with this section is not a safe harbor for compliance with state law.

3109.1.1 Fence required. Every owner, purchaser under contract, lessee, tenant, licensee or other person in possession of a tract, lot or premises on which a swimming pool is situated shall at all times maintain a fence, wall or barrier that completely surrounds the swimming pool.

3109.1.2 Swimming pool and filling. A swimming pool must be provided with a barrier that must be installed, inspected and *approved* prior to plastering or filling the swimming pool with water.

3109.2 Definitions. The following terms are [~~is~~] defined as follows [~~in Chapter 2~~]:

FRENCH DOORS. Double doors, sometimes called double-hinged patio doors, that provide access from a *dwelling* interior to the exterior in which each of the two doors are hinged and closable so that the edge of one door closes immediately adjacent to the edge of the other door with no partition between the doors. A French door is either one of the two doors.

KEYED DEAD BOLT. A door lock that is not in the doorknob, that locks by a bolt in the doorjamb, that has a bolt with at least a 1 inch throw if installed after September 1, 1993, and that is operated from the exterior by a key, card or combination and operated from the interior by a knob or level without a key, card or combination. The term includes a doorknob lock that contains a bolt with at least a 1 inch throw.

KEYLESS DEAD BOLT. A door lock not in the doorknob that locks:

1. with a bolt with a 1 inch throw into a strike plate screwed into the portion of the doorjamb surface that faces the edge of the door when the door is closed or into a metal doorjamb that serves as the strike plate, operable only by knob or lever from the door's interior and not in any manner from the door's exterior, and that is commonly known as a keyless dead bolt;

2. by a drop bolt system operated by placing a central metal plate over a metal doorjamb restraint which protrudes from the doorjamb and which is affixed to the doorjamb frame by means of three case-hardened screws at least 3 inches in length. One half of the central plate must overlap the interior surface of the door and the other half of the central plate must overlap the doorjamb when the plate is placed over the doorjamb restraint. The drop bolt system must prevent the door from being opened unless the central plate is lifted off the doorjamb restraint by a person who is on the interior side of the door; or

3. by a metal bar or metal tube that is placed across the entire interior side of the door and secured in place at each end of the bar or tube by heavy-duty metal screw hooks. The screw hooks must be at least 3 inches in length and must be screwed into the door frame stud or wall stud on each side of the door. The bar or tube must be capable of being secured to both of the screw hooks and must be permanently attached in some way to the door frame stud or wall stud. When secured to the screw hooks, the bar or tube must prevent the door from being opened unless the bar or tube is removed by a person who is on the interior side of the door. The term does not include a chain latch, flip latch, surface-mounted slide bolt, mortise door bolt, surface-mounted barrel bolt, surface-mounted swing bar door guard, spring-loaded night latch, foot bolt or other lock or latch.

[~~**SWIMMING POOLS.**~~]

3109.3 Enclosures for [~~**Public swimming**~~] **pools and spas.** Public swimming pools and spas shall be completely enclosed in accordance with Sections 3109.3.1 through 3109.3.3 [~~by a fence not less than 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not *permit* the passage of a 4-inch-diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates~~].

3109.3.1 Enclosures for Class C pools and spas and Class D pools at a Class C facility. *Pool yards* and *spa yards* of apartments, property owner associations and similar residential developments must have an enclosure that meets the following requirements:

1. The height of the *pool yard* enclosure must be at least 48 inches measured from the ground on the side away from the pool.

2. Openings under the *pool yard* enclosure may not allow a sphere of 4 inches in diameter to pass under the *pool yard* enclosure.

3. If the *pool yard* enclosure is constructed with horizontal and vertical members and the distance between the tops of the horizontal members is at least 45 inches, the openings may not allow a sphere 4 inches in diameter to pass through the enclosure.

4. If the *pool yard* enclosure is constructed with horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the openings may not allow a sphere 1¾ inches in diameter to pass through the enclosure.

5. The use of chain link fencing materials is prohibited entirely for a new *pool yard* enclosure that is constructed after January 1, 1994. The use of diagonal fencing members that are lower than 49 inches above the ground is prohibited for a new *pool yard* enclosure that is constructed after January 1, 1994.

6. Decorative designs or cutouts on or in the *pool yard* enclosure may not contain any openings greater than 1¾ inches in any direction.

7. Indentations or protrusions in a solid *pool yard* enclosure without any openings may not be greater than normal construction tolerances and tooled masonry joints on the side away from the pool.

8. Permanent equipment or structures may not be constructed or placed in a manner that makes them readily available for climbing over the *pool yard* enclosure.

9. The wall of a building may be part of the *pool yard* enclosure only if the doors and windows of the wall comply with Section 3109.3.2 and 3109.3.3.

3109.3.1.1 Gates for Class C pools and spas and Class D pools at a Class C facility. Gates of the enclosures into *pool yards* and *spa yards* of apartments, property owner associations and similar residential developments must meet the following requirements:

1. Except as provided in Section 3109.3.1.2, a gate in a fence or wall enclosing a *pool yard* as required by Section 3109.3.1 must:

   1.1. have a self-closing and self-latching device;

   1.2. have hardware enabling it to be locked at the option of whoever controls the gate by a padlock or a built-in lock operated by key, card or combination; and

   1.3. open outward away from the *pool yard*.

2. Except as provided in Item 3 and Section 3109.3.1.2, a gate latch must be installed so that it is at least 60 inches above the ground, except that it may be installed lower if:

   2.1. the latch is installed on the *pool yard* side of the gate only and is at least 3 inches below the top of the gate; and

2.2. the gate or enclosure has no opening greater than ½ inch in any direction within 18 inches from the latch, including the space between the gate and the gate post to which the gate latches.

3. A gate latch may be located 42 inches or higher above the ground if the gate cannot be opened by key, card or combination on both sides of the gate.

3109.3.1.2 Existing pool yard enclosures. Existing enclosures into *pool yards* and *spa yards* of apartments, property owner associations and similar residential developments must meet the following requirements:

1. If a *pool yard* enclosure is constructed or modified before January 1, 1994, and no municipal ordinance containing standards for *pool yard* enclosures were applicable at the time of construction or modification, the enclosure must comply with the requirements of Sections 3109.3.1 and 3109.3.1.1, except that:

   1.1. if the enclosure is constructed with chain link metal fencing material, the openings in the enclosure may not allow a sphere 2¼ inches in diameter to pass through the enclosure; or

   1.2. if the enclosure is constructed with horizontal and vertical members and the distance between the tops of the horizontal members is at least 36 inches, the openings in the enclosure may not allow a sphere 4 inches in diameter to pass through the enclosure.

2. If a *pool yard* enclosure is constructed or modified before January 1, 1994, and if the enclosure is in compliance with applicable municipal ordinances existing on January 1, 1994, and containing standards for *pool yard* enclosures, Sections 3109.3.1, 3109.3.1.1(1.3) and 3109.3.1.1(2) do not apply to the enclosure.

3109.3.1.3 Doors for Class C pools and spas and Class D pools at a Class C facility. Doors of the enclosure into *pool yards* and *spa yards* of apartments, property owner associations and similar residential developments must meet the following requirements:

1. A door, sliding glass door or *French door* may not open directly into a *pool yard* if the date of electrical service for initial construction of the building or pool is on or after January 1, 1994.

2. A door, sliding glass door or *French door* may open directly into a *pool yard* if the date of electrical service for initial construction of the building or pool is before January 1, 1994 and the *pool yard* enclosure complies with Items 3, 4, or 5, as applicable.

3. If a door of a building, other than a sliding glass door or screen door opens into a *pool yard*, the door must have a:

3.1. latch that automatically engages when the door is closed;

3.2. spring-loaded door-hinge pin, automatic door closer or similar device to cause the door to close automatically; and

3.3. keyless bolting device that is installed not less than 36 inches or more than 48 inches above the interior floor.

4. If *French doors* of a building open to the *pool yard*, one of the *French doors* must comply with Item 3.1 above and the other door must have:

4.1. a *keyed dead bolt* or keyless bolting device capable of insertion into the doorjamb above the door, and a keyless bolting device capable of insertion into the floor or threshold; or

4.2. a bolt with at least a ¾-inch throw installed inside the door and operated from the edge of the door that is capable of insertion into the doorjamb above the door and another bolt with at least a ¾-inch throw installed inside the door and operated from the edge of the door that is capable of insertion into the floor or threshold.

5. If a sliding glass door of a building opens into the *pool yard*, the sliding glass door must have:

5.1. a sliding door handle latch or sliding door security bar that is installed no more than 48 inches above the interior floor; and

5.2. a sliding door pin lock that is installed not more than 48 inches above the interior floor.

6. A door, sliding glass door or *French door* that opens into a *pool yard* from an area of a building that is not used by residents and that has no access to an area outside the *pool yard* is not required to have a lock, latch, dead bolt or keyless bolting device.

7. A *keyed dead bolt*, keyless bolting device, sliding door pin lock or sliding door security bar installed before September 1, 1993 may be installed not more than 54 inches from the floor.

8. A *keyed dead bolt* or *keyless dead bolt*, as described by Section 3109.2, installed in a dwelling on or after September 1, 1993, must have a bolt with at throw of not less than 1 inch.

3109.3.1.4 Windows and window screens for Class C pools and spas and Class D pools at a Class C facility. Windows and window screens into *pool yards* and *spa yards* of apartments, property owner associations and similar residential developments must meet the following requirements:

1. A wall of a building constructed before January 1, 1994 may not be used as part of a *pool yard* enclosure unless each window in the wall has a latch and unless each window screen on a window in the wall is affixed by a window screen latch, screws or similar means. This does not require the installation of window screens.

2. A wall of a building constructed on or after January 1, 1994 may not be used as part of a *pool yard* enclosure unless each ground floor window in the wall is permanently closed and unable to be opened.

3109.3.1.5 Building located in pool yard for Class C pools and spas and Class D pools at a Class C facility. Each door, sliding glass door, window and window screen of each dwelling unit in a residential building located in the enclosed *pool yard* must comply with Sections 3109.3.1.3 and 3109.3.1.4.

3109.3.2 Enclosures for all other Class C pools and spas and Class D pools at Class C facilities. A Class C pool or spa or a Class D pool at a Class C facility that is not subject to Section 3109.3.1 (such as pools and spas for hotels, motels, RV parks, etc.) must have a *pool yard* or *spa yard* enclosure in compliance with this section.

1. The *pool yard* or *spa yard* enclosure for a pool or spa subject to this section must consist of one or a combination of a fence, portion of a building, wall or other durable enclosure. The enclosure must comply with the following:

   1.1. The enclosure must have a minimum perpendicular height of at least 48 inches as measured from the ground surface on the outside of the fence.

   1.2. Openings in or under the enclosure must not allow the passage of a 4-inch diameter sphere.

   1.3. Planters or other structures that might allow small children to climb over the enclosure are not permitted within 36 inches, measured horizontally, from the outside of the enclosure.

   1.4. Chain link fencing may be used for the enclosure of a pool or spa installed on or before October 1, 1999 if the chain link fencing was installed on or before September 1, 2004. Chain link fencing cannot be used for an enclosure of a pool or spa installed after September 1, 2004.

1.5. Doors, gates or windows that open into a building are allowed as part of the enclosure of a pool or spa installed on or before October 1, 1999. Windows that are capable of being opened are not allowed as part of an enclosure for a pool or spa erected after October 1, 1999. Doors or gates of a building that are capable of being opened are not allowed as part of an enclosure for a pool or spa installed after October 1, 1999 unless:

1.5.1. the doors or gates between the building and the *pool yard* or *spa yard* are for entry into a storage room, restroom, shower room, dressing room or mechanical room adjacent to the pool;

1.5.2. the room does not have any door or gate openings to the outside of the *pool yard* or *spa yard* enclosure; and

1.5.3. the room does not contain any gas chlorine containers.

2. Gates and doors for *pool yard* or *spa yard* enclosures for pools and spas subject to this section must:

2.1. be equipped with self-closing and self-latching devices and be latched when the pool or spa is not in use; the self-closing device must be designed to keep the gate or door securely closed and the self-latching device must latch when the gate is allowed to close within its range of operation, which is from its fully open position to 6 inches from the fully closed position;

2.2. open outward away from the pool or spa except for gates constructed before October 1, 1999 in compliance with applicable city ordinances;

2.3. have hand activated door or gate opening hardware located at least 3½ feet above the deck or hallway;

2.4. be capable of being locked;

2.5. be locked if it is for entry into a Class A or B pool or a spa and the pool or spa is not open for use; and

2.6. be locked if it is for entry into a Class C pool or a spa or a Class D pool at a Class C facility and the pool or spa needs to be closed because of repairs, hazards or other conditions.

3. *Pool yard* and *spa yard* enclosures for pools and spas installed after October 1, 1999 must be constructed so that all persons are required to pass through an enclosure gate or door in order to gain access to the pool or spa. All gates and doors exiting a *pool yard* or *spa yard* of a pool installed after October 1, 1999 or a spa must open into a public area or walkway accessible to all users of the pool or spa.

3109.3.3 Propping open gates prohibited. The owner of a pool or spa, or the employee or agent of the owner of a pool or spa shall not knowingly allow a gate in a *pool yard* or *spa yard* enclosure to be propped open or remain propped open. A person shall not prop open a gate to *pool yard* or *spa yard* unless an agent, employee or contractor of the owner is present and doing construction, maintenance or repair work in the *pool yard* or *spa yard* or on its enclosure that reasonably requires the gate to be propped open.

3109.4 Enclosures for r[~~R~~]esidential swimming pools. Enclosures for r[~~R~~]esidential swimming pools shall comply with Sections 3109.4.1 through 3109.4.3.

Exception: A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346 need not comply with Section 3109.4.

3109.4.1 Barrier height and clearances. The top of the barrier shall be not less than 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The vertical clearance between grade and the bottom of the barrier shall not be greater than 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the vertical clearance between the top of the pool structure and the bottom of the barrier shall be not greater than 4 inches (102 mm).

3109.4.1.1 Openings. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

3109.4.1.2 Solid barrier surfaces. Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

3109.4.1.3 Closely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal member is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall be not greater than 1¾ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 1¾ inches (44 mm) in width.

3109.4.1.4 Widely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall be not greater than 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 1¾ inches (44 mm) in width.

3109.4.1.5 Chain link dimensions. Mesh size for chain link fences shall be not greater than a 2¼ inch square (57 mm square) unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1¾ inches (44 mm).

3109.4.1.6 Diagonal members. Where the barrier is composed of diagonal members, the opening formed by the diagonal members shall be not greater than 1¾ inches (44 mm).

3109.4.1.7 Gates. Access doors or gates shall comply with the requirements of Sections 3109.4.1.1 through 3109.4.1.6 and shall be equipped to accommodate a locking device. Pedestrian access doors or gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Doors or gates other than pedestrian access doors or gates shall have a self-latching device. Release mechanisms shall be in accordance with Sections 1008.1.9 and 1109.13. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the door or gate, the release mechanism shall be located on the pool side of the door or gate 3 inches (76 mm) or more, below the top of the door or gate, and the door or gate and barrier shall be without openings greater than ½ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

3109.4.1.8 Dwelling wall as a barrier. Where a wall of a *dwelling* serves as part of the barrier, one of the following shall apply:

1. Doors with direct access to the pool through that wall shall be equipped with an alarm that produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be *listed* and labeled in accordance with UL 2017. In dwellings not required to be *Accessible units*, *Type A units* or *Type B units*, the deactivation switch shall be located 54 inches (1372 mm) or more above the threshold of the door. In dwellings required to be *Accessible units*, *Type A units* or *Type B units*, the deactivation switch shall be located not higher than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the threshold of the door.

2. The pool shall be equipped with a power safety cover that complies with ASTM F 1346.

3. Other means of protection, such as self-closing doors with self-latching devices, which are *approved*, shall be accepted so long as the degree of protection afforded is not less than the protection afforded by Section 3109.4.1.8, Item 1 or 2.

3109.4.1.9 Pool structure as barrier. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then the ladder or steps either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps shall be surrounded by a barrier which meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8. Where the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

3109.4.1.10 All other pool yard enclosures. Swimming pools existing before June 1, 1988, may continue to be enclosed by fences, walls or barriers not less than 3 feet (1066.8 mm) in height, provided the fence, wall or barrier is kept in repair and otherwise maintained in compliance with all other provisions of this code.

3109.4.1.11 Additional provisions. All gates and doors into swimming pool enclosures that lawfully existed before June 1, 1988 must fully comply with the self-closing and self-latching provisions of this section.

3109.4.2 Indoor swimming pools. Walls surrounding indoor swimming pools shall not be required to comply with Section 3109.4.1.8.

3109.4.3 Prohibited locations. Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

3109.5 Entrapment avoidance. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

3109.6 Construction of swimming pools. The following standards govern the construction of swimming pools.

3109.6.1 Public pools. Title 25, Part I, Chapter 265, Subchapter L of the *Texas Administrative Code*, as amended, which provides standards for public pools and spas.

3109.6.2 Private pools. A private pool must be constructed in compliance with Appendix G of the *Dallas One- and Two-Family Dwelling Code*, as amended."

154. Chapter 31, "Special Construction," of the 2012 International Building Code is amended by adding a new Section 3112, "Fixed Guideway Transit System Stations," to read as follows:

"**SECTION 3112**
FIXED GUIDEWAY TRANSIT SYSTEM STATIONS

3112.1 General. Where provided, fixed guideway transit system stations must be installed in accordance with NFPA 130.

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

155. Chapter 31, "Special Construction," of the 2012 International Building Code is amended by adding a new Section 3113, "Storage Racks," to read as follows:

"SECTION 3113
STORAGE RACKS

3113.1 Applicability. The provisions of this section apply to all parts of buildings and structures that contain *bin box storage* or *shelf storage rack systems*.

3113.2 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.

3113.3 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 2208.

5. The aisles and stairways are designed to comply with the means of egress provisions of Chapter 10.

3113.4 Other requirements. In addition, rack storage in high-piled combustible storage areas must comply with Chapter 23 of the *Dallas Fire Code*."

156. Subsection 3201.4, "Drainage," of Section 3201, "General," of Chapter 32, "Encroachments Into the Pubic Right-of-Way," of the 2012 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*."

157. Section 3303, "Demolition," of Chapter 33, "Safeguards During Construction," of the 2012 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."

158. Subsection 3310.1, "Stairways Required," of Section 3310, "Means of Egress," of Chapter 33, "Safeguards During Construction," of the 2012 International Building Code is amended to read as follows:

"**3310.1 Stairways required.** Where a building has been constructed to a *building height* of 35 [~~50~~] feet (10,668 [~~15 240~~] mm) or four *stories*, or where an existing building exceeding 35 [~~50~~] feet (10,668 [~~15 240~~] mm) in *building height* is altered, no fewer than one temporary lighted *stairway* shall be provided unless one or more of the permanent stairways are erected as the construction progresses."

159. Subsection [F] 3311.1, "Where Required," of Section 3311, "Standpipes," of Chapter 33, "Safeguards During Construction," of the 2012 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 when the progress of construction is not more than 35 [~~40~~] feet (10,668 [~~12 192~~] mm) in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to the usable stairs. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring."

160. Chapter 34, "Existing Structures," of the 2012 International Building Code is deleted and replaced with a new Chapter 34, "Existing Structures," to read as follows:

"CHAPTER 34
EXISTING STRUCTURES

SECTION 3401
GENERAL

3401.1 General. The provisions of the *Dallas Existing Building Code* shall control the *alteration*, *repair*, *addition* and change of occupancy of existing buildings and structures.

Exception: Existing *bleachers*, grandstands and folding and telescopic seating shall comply with ICC 300."

161. The introductory paragraph to Chapter 35, "Referenced Standards," of the 2012 International Building Code is amended to read as follows:

"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 [~~102.4~~]"

162. The ASCE/SEI standards of Chapter 35, "Referenced Standards," of the 2012 International Building Code are amended by amending the following standard to read as follows:

"7—10	Minimum Design Loads for Buildings and Other Structures . . .	202, Table 1504.8, 1602.1, 1604.3, Table 1604.5, 1604.8.2, 1604.10, 1605.1, 1605.2.1, 1605.3.1, 1605.3.1.2, 1605.3.2, 1605.3.2.1, 1607.8.1, 1607.8.1.1, 1607.8.1.2, 1607.8.3, 1607.12.1, 1608.1, 1608.2, 1608.3, 1609.1.1, 1609.1.2, 1609.3, 1609.5.1, 1609.5.3, 1609.6, 1609.6.1, 1609.6.1.1, 1609.6.2, Table 1609.6.2, 1609.6.3, 1609.6.4.1, 1609.6.4.2, 1609.6.4.4.1, 1611.2, 1612.4, 1613.1, 1613.3.2, Table 1613.3.3(1), Table 1613.3.3(2), 1613.3.5, 1613.3.5.1, 1613.3.5.2, 1613.4, 1613.4.1, 1614.1, 1705.11, 1705.12, 1705.12.3, 1705.12.4, 1803.5.12, 1808.3.1, 1810.3.6.1, 1810.3.9.4, 1810.3.11.2, 1810.3.12, 1905.1.1, 1905.1.2, 1905.1.9, 2205.2.1, 2205.2.2, 2206.2, 2209.1, 2210.2, 2304.6.1, 2404.1, 2505.1, 2505.2, 2506.2.1[~~, 3404.4, 3404.5~~]"

163. The ASME standards of Chapter 35, "Referenced Standards," of the 2012 International Building Code are amended by amending the following standards to read as follows:

"ASME/A17.1 2010 [~~2007~~]/CSA B44-10 [~~07~~]	Safety Code for Elevators and Escalators [~~—with A17.1a/CSA B44a-08 Addenda~~]	.907.3.3, 911.1.5,1007.4, 1607.9.1, 3001.2, 3001.4, 3002.5, 3003.2, 3007.1, 3006.5.1, 3007.2, 3008.2, 3008.2.1, 3008.7.6, 3008.8.1[~~, 3411.8.2~~]
A 18.1—2008	Safety Standard for Platform Lifts and Stairway Chairlifts . . .	.1109.8, 2702.2.6[~~, 3411.8.3~~]"

164. The ICC standards of Chapter 35, "Referenced Standards of the 2012 International Building Code are amended by amending the following standard to read as follows:

"ICC A 117.1 —09 Accessible and Useable Buildings and Facilities . . . . 202, 907.5.2.3.4, 1007.9, 1010.1, 1010.7.5, 1010.10, 1011.4, 1022.9, 1101.2, 1107.2, 1109.1, 1109.2, 1109.5.1, 1109.5.2, 1110.3, 1110.4, 1110.4.2, 3008.7.7.1, 3008.7.7.2[~~, 3411.8.2, 3411.8.3, E101.2, E104.2, E104.2.1, E104.3.4, E106.4.9, E107.3, E108.3, E108.4, E109.2.2.2, E109.2.2.3, E109.2.3, E109.2.5, E110.2~~]"

165. The NFPA standards of Chapter 35, "Referenced Standards," of the 2012 International Building Code are amended by adding or amending the following standards to read as follows:

"13—10 Installation of Sprinkler Systems . . . . . 708.2, 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 905.3.4, 907.6.3, 1009.3, 3006.5.1"

"14—10 Installation of Standpipe and Hose System . . . . . 905.2, 905.3.4, 905.3.9, 905.4.2, 905.6.2, 905.8, 912.6"

"72—10 National Fire Alarm Code . . . . . 901.6, 903.4.1, 904.3.5, 907.2, 907.2.5, 907.2.11, 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, 907.6, 907.6.1, 907.6.5, 907.7, 907.7.1, 907.7.2, 907.2.9.2, 911.1.5, 3006.5, 3006.5.1, 3007.8"

"92B—09 Smoke Management Systems in Malls, Atria and Large Spaces . . . . . 404.6, 909.8"

"130—00 Chapter 5, "Station," of the Standard for Fixed Guideway Transit Systems . . . . . 3112.1"

"701—10 Standard Methods of Fire Tests for Flam-propagation of Textiles and Films . . . . . 202, 410.3.6, 424.2, 801.4, 806.1, 806.1.2, 806.2, 3102.3, 3102.3.1, 3102.6.1.1, 3105.4[~~, D102.2.8, H106.1.1~~]"

166. The UL standards of Chapter 35, "Referenced Standards of the 2012 International Building Code are amended by amending the following standard to read as follows:

"268—06 Smoke Detectors for Fire Protective Signaling Systems—with Revisions Through January 1999 . . . . . 407.8, 907.2.6.2, 1008.1.9.9"

167. The 2012 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. No person, firm or corporation may erect, construct, alter, rebuild, enlarge, extend, convert, maintain, replace, relocate, remove or demolish a sign or alter or change words or rearrange neon tubing on a sign or cause the same to be done without first obtaining a separate sign permit for each sign. All work done under a sign permit shall be in conformity with all requirements of all applicable laws and ordinances.

Defenses: It is a defense to prosecution under Section 3601.1 that the act or sign is included in one of the following enumerated categories. No sign permit is required for:

1. The changing of words on a sign that is designed with interchangeable words.

2. Normal maintenance to replace worn parts and repainting deteriorated paint without word change.

3. Memorial signs or tablets, names of buildings and dates of erection when cut into any masonry surface or when constructed of bronze or other noncombustible materials.

4. Government signs such as flags, insignia, legal notices or informational, directional or traffic signs that are legally required or necessary to the essential functions of government agencies.

5. Signs listed in the sign regulations of the *Dallas Development Code* as not requiring permits.

3601.2 Application. To obtain a sign permit, the applicant shall file an application in writing on a form furnished for that purpose. Every application shall:

1. Identify and describe the work to be covered by the permit for which application is made;

2. Describe the land on which the proposed work is to be done by lot, block, tract and house and street address, or similar description that will readily identify and definitely locate the proposed work;

3. Be accompanied by plans and specifications as required in this code and all applicable laws and ordinances;

4. State the valuation of the proposed work;

5. Be signed by the owner of the property on which the sign is to be located; and

6. Give such other information as may reasonably be required.

3601.3 Plans and specifications. With each application for a sign permit, not less than two sets of plans and specifications shall be submitted, and all drawings, specifications and accompanying data shall bear the name and address of the designer.

Drawings and specifications may be required to bear the official seal of an engineer duly qualified and registered under the laws of the State of Texas.

3601.4 Fees. In addition to filing an application in accordance with Section 3601.2, the applicant shall pay all applicable fees required by Section 303 of Chapter 52 of the *Dallas City Code* to the Building Inspection Division before a sign permit is issued.

3601.5 Expiration. Every sign permit issued under the provisions of this code shall expire by limitation and become null and void if the work authorized by the permit is not commenced within 120 days from the date the permit is issued, or if, at any time after the work has commenced, the work authorized by the permit is suspended or abandoned for a period of 120 days. Before work can be recommenced, another sign permit shall be obtained, and the permit fee shall be one half the amount required for a new permit for the work, provided that no changes have been made or will be made in the original plans and specifications for such work and provided that suspension or abandonment of the work has not exceeded one year.

3601.6 Suspension or revocation. The *building official* may, in writing, suspend or revoke a sign permit issued under provisions of this code whenever the permit is issued in error or on the basis of incorrect information supplied, or in violation of any law or ordinance.

3601.7 Inspections. All signs for which a permit is required are subject to inspection by the *building official.* A pier inspection and a final inspection are required for all detached signs.

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.

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 ¼ inch, except that if galvanized, such members shall not be less than $^1/_8$ 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 or 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."

168. The 2012 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 or permit is required to move the following:

1. A structure not more than 12 feet (3657 mm) in width, not more than 40 feet (12,192 mm) in length and not more than 13½ feet (4145.3 mm) in height when loaded, provided the truck, trailer or other vehicle on which the structure is transported is equipped with rubber tires and complies with the *Texas Transportation Code*; or

2. A structure, or superheavy or oversized equipment, being moved over any state or federal highway within the city when:

   2.1. It is being moved under a Texas Highway Department permit;

   2.2. The moving route is confined to a state or federal highway; or

   2.3. The destination is outside the city.

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 owner 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. 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.

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.

SECTION 3706
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."

169. The 2012 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 for 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*."

170. The 2012 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 indicated in this section:

PREMISES. A lot or unplatted tract of land that is reflected in the plat books of the building inspection division of the city. Refer to Section 51-4.601 or 51A-4.601 of the *Dallas Development Code*.

TENT. Any structure, enclosure or shelter constructed of fabric or other pliable material supported by any manner except by air or the contents protected by the material.

SECTION 3903
PERMIT REQUIREMENTS FOR TENTS

3903.1 Offense. A person commits an offense if he or she 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 person who desires to erect and maintain a tent shall file a written application for a *tent* permit with the *building official* on a form furnished for that purpose.

Exception: A *tent* permit is not required for a *tent* that either:

1. Covers an area of less than 400 square feet (37.1612 m^2), including all connecting areas or spaces with a common means of egress or entrance; or

2. Has an occupant load of less than 10 persons; or

3. Is included as part of a special events permit.

3903.3 Application. The application shall include all of the following:

1. Three copies of a plan drawn to scale showing the location of each *tent* and permanent improvement on the premises, the number of off-street parking spaces as required by the *Dallas Development Code*, and adequate details regarding the seating capacity and the location of exits in each *tent*.

2. If the *tent* is to be erected in or adjacent to a residentially zoned district, an approved petition, on a form provided by the building official, signed by all owners of land within 100 feet (30,480 mm), including streets and alleys, measured from the boundary of the premises on which the *tent* is to be erected.

3. A fee as specified in Section 303 of Chapter 52 of the *Dallas City Code*.

4. Any additional information required by the *building official* to ensure the provision of adequate safeguards for the preservation of public health, peace, comfort and safety.

3903.4 Issuance of permit.

3903.4.1 Maximum duration of permit. The *building official* may issue a *tent* permit for a period not to exceed 30 consecutive days.

Exception: The *building official* may extend a *tent* permit for additional 30-day periods if the tent is located on public property and being used for a demonstrated public purpose and does not create a threat to the public safety. In no event may a *tent* permit be issued for more than a total of nine months within any 12-consecutive-month period. A fee in the amount of the initial *tent* permit fee shall be paid for each 30-day period a *tent* permit is extended.

3903.4.2 Limit on permits on same property within any 12-consecutive-month period. A *tent* permit may not be issued for the same property more than once in any 12-consecutive-month period.

Exception: More than one *tent* permit may be issued for the same property in a 12-consecutive-month period if the total time period for all *tent* permits issued on that property does not exceed 60 days in any 12-consecutive-month period.

3903.4.3 Multiple tents under one permit. A *tent* permit may be issued for more than one *tent* if all *tents* are on the same property at the same time for the same event or purpose and meet the provisions of Section 3904.5.

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 2403.8 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.

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."

171. The 2012 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 warm-blooded 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.*

Exceptions: A *demolition* permit is not required:

1. for *demolition* of a fence or swimming pool;
2. if the *demolition* work performed is in conjunction with remodeling, *alteration* or *repair* of a structure for which a building permit is obtained; or
3. for *demolition* of a structure with a total floor area of less than 120 square feet (11.148 m^2).

4003.2 Fees. Before being issued a *demolition* permit, the applicant shall pay all applicable fees required by Section 303 of Chapter 52 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* shall 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 street services.
2. Department of sanitation services.
3. Department of code compliance.
4. Fire department.
5. Police department.
6. Department of environmental and health services.
7. Department of public works and transportation.

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 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 m^2) 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 expires two years 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 m^2) 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.

3. 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/m^2) 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.

Exception: 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."

172. The 2012 International Building Code is amended by adding a new Chapter 41, "Building Security," to read as follows:

"CHAPTER 41
BUILDING SECURITY

SECTION 4110
PURPOSE

4110.1 General. The purpose of this chapter is to establish minimum standards to make dwelling units resistant to unlawful entry.

SECTION 4111
SCOPE

4111.1 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 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 4112
OBSTRUCTING MEANS OF EGRESS

4112.1 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.

4112.2 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 1029 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 Sections 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 4113
ENTRY VISION

4113.1 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 716.5.3, 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.

4113.2 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.

SECTION 4114
SWINGING DOORS

4114.1 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.

4114.2 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.

4114.3 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.

4114.4 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 4115
WINDOWS AND SLIDING DOORS

4115.1 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.

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 1003.

SECTION 4116
GARAGE DOORS

4116.1 General requirements. Vehicle access doors in enclosed attached garages shall be equipped with a security device or locking devices.

SECTION 4117
ALTERNATE MATERIALS OR METHODS

4117.1 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*."

173. The 2012 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 dissolution of common boundary lines between two or more lots 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 dissolution of common boundary lines 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 exists and restrooms.

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 dissolution of the common boundary lines described in the agreement is only for the limited purpose of meeting requirements of this code, and that actual lines of property ownership 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*."

174. The 2012 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 version 2.0 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 LEED NC (new construction) version 2.2 to present, LEED CS (core and shell) version 2.0 to present, LEED CI (commercial interiors) version 2.0 to present, LEED for schools version 2007, LEED for healthcare, LEED for retail version 2 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.

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 achieve 1 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* 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*."

175. Appendices A, B, C, D, E, F, G, H, I, J, K, L, and M of the 2012 International Building Code are not adopted.

176. All chapters of the 2012 International Building Code adopted by this ordinance are subchapters of Chapter 53 of the Dallas City Code, as amended.

177. All references in the 2012 International Building Code to the fire code, plumbing code, mechanical code, electrical code, residential code, existing building code, energy conservation code, fuel gas code, and green construction code refer, respectively, to Chapters 16, 54, 55, 56, 57, 58, 59, 60, and 61 of the Dallas City Code.

SECTION 2. Any errata corrections of the 2012 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.

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 November 1, 2013, and it is accordingly so ordained.

APPROVED AS TO FORM:

WARREN M. S. ERNST, Interim City Attorney

By _____
Assistant City Attorney

Passed SEP 25 2013

For a Copy of the exhibit
Please contact
The City Secretary's Office