

**CITY OF ROWLETT  
INTERNATIONAL BUILDING CODE AMENDMENTS**

**2015 ED.**

***Section 101.4; change to read as follows:***

**101.4 Referenced codes.** The other codes listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code, when specifically adopted, shall be considered part of the requirements of this code to the prescribed extent of each such reference. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the Electrical Code shall mean the National Electrical Code as adopted.

**Section 101.4.7; is amended by adding the following exception:**

**Exception:** The existing building, or any registered historical building, need not comply with this section if a supervised fire sprinkler system complying with 903.3.1 is installed, and not otherwise required by this code, for the new use, existing use, or classification. Nothing in this section permits the reduction or elimination of Life Safety systems or subsystems including, but not limited too means of egress and other fire safety systems and processes.

***Section 101.4.8; add the following:***

**101.4.8 Electrical.** The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

***Section 103.1; amend to insert the Department Name as follows:***

**Rowlett Building Department**

**103.1 Creation of enforcement agency.** The Rowlett Building Department is hereby created and the official in charge thereof shall be known as the *building official*.

***Section 104.2.1; delete this section.***

***Section 104.10.1; amend to read as follows:***

For purposes of this section and Section 1612.3, Chapter 82 of the Rowlett Code of Ordinances prevails.

***Section 104; Section 104.12 is added to read as follows:***

**104.12 Reports and Forms.** Where a report, or other form prescribed by this code, is required the NCTCOG documents or other forms prescribed by the Building Official may be used.

**Section 105.2 Work exempt from permit; amend to read as follows:**

**105.2 Work Exempt from Permit** Exemptions from *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. *Permits* shall not be required for the following:

**Building:**

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area is not greater than 120 square feet (11 m<sup>2</sup>).
2. Oil derricks.
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
4. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18 925 L) and the ratio of height to diameter or width is not greater than 2:1.
5. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
6. Temporary motion picture, television and theater stage sets and scenery.
7. Prefabricated *swimming pools* accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18 925 L) and are installed entirely above ground.
8. Swings and other playground equipment accessory to detached one- and two-family *dwellings*.
9. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1372 mm) from the *exterior wall* and do not require additional support.
10. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

**Section 105.5; change to read as follows:**

**105.5 Expiration** Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced or last approved inspection. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**Section 105; Section 105.8 is added to read as follows:**

**105.8 Permit cancellation.** When the holder of a permit issued under this division fails or refuses to complete work, in whole or in part, the building owner or person acting on behalf of the owner may submit a written request to the Building Official for the cancellation of the original permit to allow another licensed contractor to secure a permit to complete the work.

Upon receipt of a request for cancellation in accordance with subsection (a) and a new contractor being assigned, the Building Official will cancel the permit, and will notify the previous permit holder in writing of the cancellation of the permit. Electronic communication with the registered electronic address of the permit holder may serve as proper notice.

A contractor change fee will be charged in accordance with the Fee schedule set forth by the City Council

**Section 107.3.4 section 107.3.4.1.2 is added to read as follows:**

107.3.4.1.2 In addition to the state law and adopted Building Code certain types of buildings shall be designed by a registered design professional. Privately owned buildings with classifications A, E, and I occupancies shall be designed by registered design professionals.

**Section 109; add Section 109.7 to read as follows:**

**109.7 Re-inspection Fee.** A fee as established by city council resolution may be charged when:

1. The inspection called for is not ready when the inspector arrives;
2. No building address or permit card is clearly posted facing the street or roadway;
3. City approved plans are not on the job site available to the inspector;
4. The building is locked or work otherwise not available for inspection when called;
5. The job site is red-tagged twice for the same item;
6. The original red tag has been removed from the job site;
7. Failure to maintain erosion control, trash control or tree protection;
8. More than one inspection is called for the same system or work at the same building under the same permit.

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

**Section 109; add Section 109.8, 109.8.1, 109.8.2 and 109.9 to read as follows:**

**109.8 Work without a permit.**

**109.8.1 Investigation.** Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, a special investigation shall be made before a permit may be issued for such work.

**109.8.2 Fee.** An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code or the city fee schedule as applicable. The payment of such investigation fee shall not exempt the applicant from compliance with all other provisions of either this code or the technical codes nor from penalty prescribed by law.

**109.9 Unauthorized cover up fee.** Any work concealed without first obtaining the required inspection in violation of Section 110 shall be assessed a fee as established by the city fee schedule.

***Section 110.3.5; Lath, gypsum board and gypsum panel product inspection. Delete exception***

***Section 110.1; is amended by adding the following:***

**110.3.11 Inspections Cancellation.** Inspections shall be cancelled when work is not ready upon start of inspection

***Section 111; is amended by adding the following:***

**111.1.1 Unauthorized Occupancy.** It is unlawful for a builder, building contractor, or building owner to allow any person to occupy a building until a certificate of occupancy is issued.

**111.1.2 Issuance.** No certificate of occupancy will be issued until the City has been paid all fees and costs that are related to the building or structure. The fees and costs include those related to the infrastructure of the building, such as impact fees and fees for the installation of water meter and water and wastewater connections.

***Section 115 amended by adding the following:***

**Sec 115.4 Construction Noise.** It is unlawful for any person to cause construction noise to be made between 9:00 p.m. and 7:00 a.m. if the noise can be heard from any public street or from a residence on private property in the City other than the property on which the noise is made. Nothing in this section supersedes any other local or state statute as related to noise.

**Exceptions:**

- (1) Construction noise from construction activities performed by or for a governmental entity;
- (2) Construction noise from emergency construction activities conducted solely to alleviate an imminent danger to persons or property; or
- (3) Construction noise from construction activities that are required in order for the installation or performance of certain systems or subsystems to meet best practices of building construction. This exception will apply only upon the Building Official's prior written approval. To obtain the Building Official's approval a contractor must provide

written certification from a licensed professional engineer and any other information the Building Official determines is required to prove that the activity is required for best practices. At least 72 hours prior to the impending construction activity, the Building Official may require the contractor to provide written notification to surrounding properties. A committee made up of engineering, planning, city administration and building department shall serve as arbiters of this section.

***Section 202; amend definition of Ambulatory Care Facility 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 not be limited to the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

***Section 202; add definition of Assisting Living Facilities to read as follows.***

**ASSISTED LIVING FACILITIES.** 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.

***Section 202; change definition of “Atrium” as follows:***

**ATRIUM.** An opening connecting ~~two~~ three 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.

***Section 202; change definition of “Existing Structure” as follows:***

**EXISTING STRUCTURE.** Also known as **EXISTING BUILDING.** A building, structure or space, with and approved final inspection issued under a code edition which is at least 2 published code editions preceding the currently adopted building code in Rowlett; or a change of occupancy. For applications of provisions in flood hazard areas, an existing structure or building is any building or structure for which the start of construction commenced before the effective date of the community first flood plain management code, ordinance or standard.

***Section 202; add definition of “Repair Garage” as follows:***

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

***Section 202; amend definition of SPECIAL INSPECTOR to read as follows:***

**SPECIAL INSPECTOR.** A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the registered design professional in responsible charge and the Building Official as having the competence necessary to inspect a particular type of construction requiring special inspection.

***Section 202; amend definition to read as follows:***

**HIGH-RISE BUILDING.** A building with an occupied floor located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

***Section 303.1.3; add a sentence 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 Chapter 10 and 11.

***Section 304.1; add the following to the list of occupancies:***

- Fire stations
- Police stations with detention facilities for 5 or less

***Section 307.1.1; add the following sentence to Exception 4:***

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 IFC Chapter 21, Dry Cleaning Plant provisions.

***Section 403.1, Exception 3; change to read as follows:***

**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.
3. The open air portion of a building
4. Special industrial occupancies in accordance with Section 503.1.1.
5. Buildings with:
  - 5.1. A Group H-1 occupancy;
  - 5.2. A Group H-2 occupancy in accordance with Section 415.8, 415.9.2, 415.9.3 or 426.1; or,
  - 5.3. A Group H-3 occupancy in accordance with Section 415.8.

***Section 403.3, Exception; delete item 2.***

***Section 403.3.2; change to read as follows:***

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

**Exception:** Two connections to the same main shall be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through no fewer than one of the connections.

***Section 404.5; delete Exception.***

***Section 406.3.5.1; Amend to read as follows:***

**406.3.5.1 Carport Separation.** A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm).

***Section 506.2.2; add sentence to read as follows:***

**506.3.2.1 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 fire lane, a minimum 10-foot wide pathway meeting fire department access from the street or approved fire lane shall be provided.

***Section 708.10 is added to read as follows:***

**Section 708.10 Multiple Occupancy Buildings**

**708.10 Scope.** The provisions of this chapter shall apply to all buildings and structures where more than one (1) occupancy and/or business is located within same building or structure.

**708.11 Separation.** Each occupancy shall be separated from adjoining occupancies by a minimum one-hour fire rated demising wall or assembly, constructed in accordance with the International Building Code. A more restrictive rating, based on occupancy classification, may require the separation to increase.

**Section 712.1.9, change item 4 to read as follows:**

4. Is not open to a corridor in Group I and H occupancies.

**Section 901.6.1; add Section 901.6.1.1 to read as follows:**

**901.6.1.1 Standpipe Testing.** Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be backflushed when foreign material is present, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the *fire code official*) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the *fire code official*.
5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.
6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (*fire code official*) shall be followed.



7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
9. Contact the *fire code official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the *fire code official*.

**Section 903.1.1; change to read as follows:**

**[F] 903.1.1 Alternative protection.** Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard or as *approved* by the *fire code official*.

**Section 903.1 is amended by adding the following:**

903.1.2 More restrictive section applies. Where fire sprinklers are required in other sections of this code, the most restrictive requirement will apply to methods of construction, installation, or other system requirements.

**Section 903.2; Section 903.2 through Section 903.2.12 amended to read as follows:**

**903.2 Where Required.** Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. All structures exceeding 5000 sq ft., unless expressly exempted in this section, shall require automatic sprinkler systems.

Automatic Sprinklers shall 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 shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating "ELEVATOR MACHINERY—NO STORAGE ALLOWED."

**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 story where the fire area containing the Group A-1, A-2, A-3 or A-4 occupancy is located, and throughout all stories from the Group A occupancy to, and including, the levels 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.

**903.2.1.1 Group A-1.** An automatic sprinkler system shall be provided for fire areas containing Group A-1 occupancies and intervening floors of the building where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (1115 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area is two or more stories in height.
5. The fire area contains a multi-theater complex.

Note: For the purpose of this provision, fire walls shall not define separate buildings.

**903.2.1.2 Group A-2.** An automatic sprinkler system shall be provided for fire areas containing Group A-2 occupancies and intervening floors of the building where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464 m<sup>2</sup>).
2. The fire area has an occupant load of 100 or more.
3. The fire area is two or more stories in height.
4. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Note: For the purpose of this provision, fire walls shall not define separate buildings.

**903.2.1.3 Group A-3.** An automatic sprinkler system shall be provided for fire areas containing Group A-3 occupancies and intervening floors of the building where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (1115 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is two or more stories in height.
4. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Note: For the purpose of this provision, fire walls shall not define separate buildings.

**903.2.1.4 Group A-4.** An automatic sprinkler system shall be provided for fire areas containing Group A-4 occupancies and intervening floors of the building where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (1115 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Note: For the purpose of this provision, fire walls shall not define separate buildings.

**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<sup>2</sup>).

**903.2.1.6 Assembly Occupancies on Roofs.** Where an occupied roof has an assembly occupancy with an occupant load exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the occupied roof and the level of exit discharge shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

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

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

**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.

**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 5,000 square feet in area.
2. Throughout every portion of educational buildings below the lowest level of exit discharge.

**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 not fewer than one exterior exit door at ground level. However, partially sprinklered buildings are not permitted under this exception.

Note; For the purpose of this provision, fire walls shall not define separate buildings.

**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 5,000 square feet.
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 5,000 square feet.
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).

Note: For the purpose of this provision, fire walls shall not define separate buildings.

**903.2.4.1 Woodworking Operations.** An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 2,500 square feet in area (232 m<sup>2</sup>) that generate finely divided combustible waste or use finely divided combustible materials.

**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.

**903.2.5.1 General.** An automatic sprinkler system shall be installed in Group H occupancies.

**903.2.5.2 Group H-5 Occupancies.** An automatic sprinkler system shall be installed throughout buildings containing Group H-5 occupancies. The design of the sprinkler system shall be not less than that required under the International Building 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.

TABLE 903.2.5.2 GROUP H-5 SPRINKLER DESIGN CRITERIA

LOCATION	OCCUPANCY HAZARD CLASSIFICATION
Fabrication areas	Ordinary Hazard Group 2
Service corridors	Ordinary Hazard Group 2
Storage rooms without dispensing	Ordinary Hazard Group 2
Storage rooms with dispensing	Extra Hazard Group 2
Corridors	Ordinary Hazard Group 2

**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).

**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 Condition 1 facilities.
2. An automatic sprinkler system is not required where Group I-4 day care facilities are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door.
3. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the level of exit discharge and all floors below the level of exit discharge other than areas classified as an open parking garage.

Note: For the purpose of this provision, fire walls shall not define separate buildings.

**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 5,000 square feet (1115 m<sup>2</sup>).
2. A Group M fire area is located two or more stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 5,000 square feet (2230 m<sup>2</sup>).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m<sup>2</sup>).

Note: For the purpose of this provision, fire walls shall not define separate buildings.

**903.2.7.1 High-Piled Storage.** An automatic sprinkler system shall be provided as required in Chapter 32 in all buildings of Group M where storage of merchandise is in high-piled or rack storage arrays.

**903.2.8 Group R.** An automatic sprinkler system installed shall be provided throughout buildings where a Group R conditioned space exceeds 5,000 square feet.

**903.2.8.1 Group R-3.** An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 occupancies.

**903.2.8.2 Group R-4 Condition 1.** An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-4 Condition 1 occupancies.

**903.2.8.3 Group R-4 Condition 2.** An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group R-4 Condition 2 occupancies. Attics shall be protected in accordance with Section 903.2.8.3.1 or 903.2.8.3.2.

**903.2.8.3.1 Attics Used for Living Purposes, Storage or Fuel-Fired Equipment.** Attics used for living purposes, storage or fuel-fired equipment shall be protected throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2.

**903.2.8.3.2 Attics Not Used for Living Purposes, Storage or Fuel-Fired Equipment.** Attics not used for living purposes, storage or fuel-fired equipment shall be protected in accordance with one of the following:

1. Attics protected throughout by a heat detector system arranged to activate the building fire alarm system in accordance with Section 907.2.10.
2. Attics constructed of noncombustible materials.
3. Attics constructed of fire-retardant-treated wood framing complying with Section 2303.2 of the International Building Code.
4. The automatic sprinkler system shall be extended to provide protection throughout the attic space.

**903.2.8.4 Care Facilities.** An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in care facilities with five or fewer individuals in a single-family dwelling.

**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 5,000 square feet.
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 5,000 square feet.
4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.
5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).

**903.2.9.1 Repair Garages.** An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the International Building Code, as shown:

1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 5,000 square feet.

2. Buildings not more than one story above grade plane, with a fire area containing a repair garage exceeding 5,000 square feet.
3. Buildings with repair garages servicing vehicles parked in basements.
4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds 5,000 square feet.

**903.2.9.2 Bulk Storage of Tires.** Buildings and structures where the area for the storage of tires exceeds 20,000 cubic feet shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

**903.2.9.3 Self-Service Storage Facility.** An automatic sprinkler system shall be installed throughout all self-service storage facilities.

**903.2.10 Group S-2 Enclosed Parking Garages. 903.2.10 Group S-2.** An automatic sprinkler system shall be provided throughout all buildings containing a Group S-2 occupancy where one of the following conditions exist:

1. Where a Group S-2 fire area exceeds 5,000 square feet;

**Exception:** Open parking garages.

2. Where the fire area of an enclosed parking garage exceeds 5,000 square feet; or
3. Where enclosed parking garages are located beneath other groups.

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

**903.2.10.1 Commercial Parking Garages.** An automatic sprinkler system shall be provided throughout buildings used for storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.

**903.2.11 Specific Buildings 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 903.2.11.6.

**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<sup>2</sup>) and where there is not provided not fewer than 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 1011 or an outside ramp complying with Section 1012. Openings shall be located in each 50 linear feet (15 240 mm), or fraction thereof, of *exterior wall* in the story on 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 not less than 20

square feet (1.86 m<sup>2</sup>) 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.

**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 such that firefighting or rescue cannot be accomplished from the exterior.

**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 not fewer than two sides of the story.

**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*.

**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.

**903.2.11.3 Buildings 35 feet or more in height.** An automatic sprinkler system shall be installed throughout buildings that have one or more stories, other than penthouses in compliance with Section 1510 of the *International Building Code*, located 35 feet (10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

**Exception:** Open parking structures in compliance with Section 406.5 of the *International Building Code*, *having no other occupancies above the subject garage*.

**903.2.11.4 Ducts Conveying Hazardous Exhausts** Where required by the *International Mechanical Code*, automatic sprinklers shall be provided in ducts conveying hazardous exhaust or flammable or combustible materials.

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



**903.2.11.5 Commercial Cooking Operations** An *automatic sprinkler system* shall be installed in commercial kitchen exhaust hood and duct systems where an *automatic sprinkler system* is used to comply with Section 904.

**903.2.11.6 Other Required Suppression Systems** In addition to the requirements of Section 903.2, the provisions indicated in Table 903.2.11.6 require the installation of a fire suppression system for certain buildings and areas.

**TABLE 903.2.11.6 ADDITIONAL REQUIRED FIRE SUPPRESSION SYSTEMS**

SECTION	SUBJECT
914.2.1	Covered and open mall buildings
914.3.1	High-rise buildings
914.4.1	Atriums
914.5.1	Underground structures
914.6.1	Stages
914.7.1	Special amusement buildings
914.8.2	Airport traffic control towers
914.8.3, 914.8.6	Aircraft hangars
914.9	Flammable finishes
914.10	Drying rooms
914.11.1	Ambulatory care facilities
1029.6.2.3	Smoke-protected assembly seating
1103.5.1	Pyroxylin plastic storage in existing buildings

1103.5.2	Existing Group I-2 occupancies
1103.5.3	Existing Group I-2 Condition 2 occupancies
1103.5.4	Pyroxylin plastics
2108.2	Dry cleaning plants
2108.3	Dry cleaning machines
2309.3.2.6.2	Hydrogen motor fuel-dispensing area canopies
2404.2	Spray finishing in Group A, E, I or R
2404.4	Spray booths and spray rooms
2405.2	Dip-tank rooms in Group A, I or R
2405.4.1	Dip tanks
2405.9.4	Hardening and tempering tanks
2703.10	HPM facilities
2703.10.1.1	HPM work station exhaust
2703.10.2	HPM gas cabinets and exhausted enclosures
2703.10.3	HPM exit access corridor
2703.10.4	HPM exhaust ducts
2703.10.4.1	HPM noncombustible ducts
2703.10.4.2	HPM combustible ducts

2807.3	Lumber production conveyor enclosures
2808.7	Recycling facility conveyor enclosures
3006.1	Class A and B ovens
3006.2	Class C and D ovens
Table 3206.2	Storage fire protection
3206.4	Storage
3704.5	Storage of more than 1,000 cubic feet of loose combustible fibers
5003.8.4.1	Gas rooms
5003.8.5.3	Exhausted enclosures
5004.5	Indoor storage of hazardous materials

**TABLE 903.2.11.6—continued ADDITIONAL REQUIRED FIRE SUPPRESSION SYSTEMS**

<b>SECTION</b>	<b>SUBJECT</b>
5005.1.8	Indoor dispensing of hazardous materials
5104.4.1	Aerosol warehouses
5106.3.2	Aerosol display and merchandising areas
5306.2.1	Exterior medical gas storage room
5306.2.2	Interior medical gas storage room
5306.2.3	Medical gas storage cabinet

5606.5.2.1	Storage of smokeless propellant
5606.5.2.3	Storage of small arms primers
5704.3.7.5.1	Flammable and combustible liquid storage rooms
5704.3.8.4	Flammable and combustible liquid storage warehouses
5705.3.7.3	Flammable and combustible liquid Group H-2 or H-3 areas
6004.1.2	Gas cabinets for highly toxic and toxic gas
6004.1.3	Exhausted enclosures for highly toxic and toxic gas
6004.2.2.6	Gas rooms for highly toxic and toxic gas
6004.3.3	Outdoor storage for highly toxic and toxic gas
6504.1.1	Pyroxylin plastic storage cabinets
6504.1.3	Pyroxylin plastic storage vaults
6504.2	Pyroxylin plastic storage and manufacturing

For SI: 1 cubic foot = 0.023 m<sup>3</sup>.

**903.2.11.7 High-Piled Combustible Storage.** For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.

**903.2.11.8 Spray Booths and Rooms.** New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

**903.2.11.9 Buildings Over 5,000 sq. ft.** An automatic sprinkler system shall be installed throughout all buildings with a building area 5,000 sq. ft. or greater in Section 903.2 through Section 903.2.12 and in all existing buildings that are enlarged to be 5,000 sq. ft. or greater. For

the purpose of this provision, fire walls shall not define separate buildings.

**Exception:** Open parking garages in compliance with Section 406.5 of the *International Building Code*.

For the purposes of this section, any attachment, awning, cover, or porte cochere is considered fire area and is calculated in total building area. Other calculations are as prescribed in the International Building Code.

**903.2.11.10 Other occupancy classifications.** An automatic sprinkler system shall be provided throughout all buildings classified as Group B or Group F-2 having a fire area exceeding 5,000 square feet. For the purpose of this provision, fire walls or partitions shall not define separate buildings.

**903.2.12 During Construction** *Automatic sprinkler systems* required during construction, alteration and demolition operations shall be provided in accordance with Section 3313.

**Section 903.3.1.1.1; change to read as follows:**

**[F] 903.3.1.1.1 Exempt locations.** When approved by the *fire code official*, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an *approved* automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from a room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. 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 code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

**Section 903.3.1.2.3; add section to read as follows:**

**[F] Section 903.3.1.2.3 Attics and Attached Garages.** Sprinkler protection is required in attic spaces of such buildings two or more stories in height, in accordance with NFPA 13 and or NFPA 13R requirements, and attached garages. Does not apply to one and two family dwellings unless access restrictions are determined by the fire official.

**Section 903.3.1.3; change to read as follows:**

**[F] 903.3.1.3 NFPA 13D sprinkler systems.** *Automatic sprinkler systems* installed in one- and two-family *dwellings*; Group R-3; Group R-4 Condition 1 and *townhouses* shall be permitted to be

installed throughout in accordance with NFPA 13D or in accordance with state law.

**Section 903.3.1.4; add to read as follows:**

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

**903.3.1.4.1 Attics.** Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

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

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

**903.3.1.4.2 Heat trace/insulation.** Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

**Section 903.3.5; add a second paragraph to read as follows:**

**[F]** Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every water-based fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

**Section 903.4; add a second paragraph after the exceptions to read as follows:**

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

**Section 903.4.2; add second paragraph to read as follows:**

**[F]** 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.

**Section 905.2; change to read as follows:**

**[F] 905.2 Installation standard.** Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

**Section 905.3; add Section 905.3.9 and exception to read as follows:**

**[F] 905.3.9 Buildings exceeding 10,000 sq. ft.** In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

**Exceptions:**

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

**Section 905.4, change Item 1., 3., and 5. and add Item 7. to read as follows:**

- [F] 1.** In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
2. On each side of the wall adjacent to the exit opening of a horizontal exit.
  3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

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

4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way hose connection located to serve the roof or at the highest landing of an exit stairway with stair access to the roof provided in accordance with Section 1011.12.

6. Where the most remote portion of a non-sprinklered 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 two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

**Section 905.9; add a second paragraph after the exceptions to read as follows:**

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

**Section 907.1; add Section 907.1.4 and 907.1.4.1 to read as follows:**

**[F] 907.1.4 Design standards.** Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

**Section 907.2.1; change to read as follows:**

**[F] 907.2.1 Group A.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant load of 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.-10 of the *International Building Code* 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.

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

Activation of fire alarm notification appliances shall:

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.

**Section 907.2.3; change to read as follows:**



**[F] 907.2.3 Group E.** A manual fire alarm system 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. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' 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 occupancies with an occupant load of 50 or less; or, a 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 2 1/2 or less years of age, see Section 907.2.6.)
2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.
3. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
  - 3.1. Interior corridors are protected by smoke detectors.
  - 3.2. Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.
  - 3.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
4. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
  - 4.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
  - 4.2. The emergency voice/alarm communication system will activate on sprinkler waterflow.
  - 4.3. Manual activation is provided from a normally occupied location.

**Section 907.2.13, Exception 3; change to read as follows:**

**[F] 3.** Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the *International Building Code*; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.

**Section 907.4.2; add Section 907.4.2.7 to read as follows:**

**[F] 907.4.2.7 Type.** Manual alarm initiating devices shall be an approved double action type.

**Section 907.6.1; add Section 907.6.1.1 to read as follows:**

**[F] 907.6.1.1 Wiring Installation.** All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

**Section 907.6.3; delete all four Exceptions.**

**Section 907.6.6; – add sentence at end of paragraph to read as follows:**

**[F]** See 907.6.3 for the required information transmitted to the supervising station.

**Section 909.22; add to read as follows:**

**[F] 909.22 Stairway or ramp pressurization alternative.** Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the Fire Department as per Section 105.7.

**[F] 909.22.1 Ventilating equipment.** The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

**[F] 909.22.1.1 Ventilation systems.** Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the

smokeproof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

**Exceptions:**

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
2. Where encased with not less than 2 inches (51 mm) of concrete.
3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

**[F] 909.22.1.2 Standby power.** Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

**[F] 909.22.1.3 Acceptance and testing.** Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

***Section 910.2; change Exception 2. and 3. to read as follows:***

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

***Section 910.2; add subsections 910.2.3 with exceptions to read as follows:***

**[F] 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<sup>2</sup>) 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.

***Section 910.3; add section 910.3.4 to read as follows:***

**[F] 910.3.4 Vent operation.** Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

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

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

**Exception:** Manual only system per 910.2

**[F] 910.3.4.2 Nonsprinklered buildings.** Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

**Exception:** Listed gravity-operated drop out vents.

***Section 910.4.3.1; change to read as follows:***

**[F] 910.4.3.1 Makeup air.** Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m<sup>2</sup> per 0.4719 m<sup>3</sup>/s) of smoke exhaust.

**Section 910.4.4; change to read as follows:**

**[F] 910.4.4 Activation.** The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

**Exception:** Manual only systems per Section 910.2.

**Section 912.2; add Section 912.2.3 to read as follows:**

**[F] 912.2.3 Hydrant distance.** An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

**Section 913.2.1; add second paragraph and exception to read as follows:**

**[F]** When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

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

**Section 1006.2.2.6 Add a new Section 1006.2.2.6 as follows:**

**1006.2.2.6 Electrical Rooms.** For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.

**Section 1009.1; add the following Exception 4:**

#### **1009.1 Accessible Means of Egress Required**

Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress are required by Section 1006.2 or 1006.3 from any accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

##### **Exceptions:**

1. *Accessible means of egress* are not required to be provided in existing buildings.
2. One *accessible means of egress* is required from an *accessible mezzanine* level in accordance with Section 1009.3, 1009.4 or 1009.5.
3. In assembly areas with ramped *aisles* or stepped *aisles*, one *accessible means of egress* is permitted where the *common path of egress travel* is *accessible* and meets the requirements in Section 1029.8.
4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009.

**Section 1010.1.9.4 Bolt Locks; amend exceptions 3 and 4 as follows:**

**1010.1.9.4 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, M or S occupancy.
4. Where a pair of doors serves a Group A, B, F, M or S occupancy
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 capacity requirements and the inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.

**Section 1015.8 Window Openings. Revise text as follows:**

1. Operable windows where the top of the sill of the opening is located more than 55 feet (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

**Section 1020.1 Construction; add exception 6 to read as follows:**

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

**Section 1029.1.1.1 Delete this section. Spaces under grandstands and bleachers;**

**Section 1101.1 Scope. add exception to Section 1101.1 as follows:**

**Exception:** Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

**Section 1203.1; amended to read as follows:**

**1203.1 General.** Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the *International Mechanical Code*.

Where air infiltration rate in a *dwelling unit* is 5 air changes or less per hour when tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with Section 402.4.1.2 of the *International Energy Conservation Code*, the *dwelling unit* shall be ventilated by mechanical means in accordance with Section 403 of the *International Mechanical Code*.

**Table 1505.1; delete footnote c and replace footnote b with the following:**

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. Non-classified roof coverings shall be permitted on buildings of U occupancies having not more than 120 sq. ft. of protected roof area. When exceeding 120 sq. ft. of protected roof area, buildings of U occupancies may use non-rated non-combustible roof coverings.

**Section 1505.7; delete the section**

***Section 1510.1; amend to read as follows:***

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

***Section 1704.2, Special inspections and tests is amended to read as follows:***

**1704.2 Special inspections and tests.** Where application is made to the Building Official for construction as specified in Section 105, the owner or the owner's authorized agent, or the registered design professional in responsible charge, other than the contractor, shall employ one or more approved agencies to provide special inspections and tests during construction on the types of work listed under Section 1705 and identify the approved agencies to the Building Official. The special inspector shall not be employed by the contractor. These special inspections and tests are in addition to the inspections identified by the Building Official that are identified in Section 110.

***Section 1704.2.1, Special inspector qualifications, is amended to read as follows:***

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



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

***Section 1704.2.4, Report requirement, is amended to read as follows:***

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

***Section 1704.2.5.2, Fabricator approval, is amended to read as follows:***

**1704.2.5.1 Fabricator approval.** Special inspections during fabrications required by Section 1704 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 agency, or a fabricator that is enrolled in a nationally accepted inspections program. At completion of fabrication, the acceptable or approved fabricator shall submit a certificate of compliance to the owner or the owner's authorized agent or the registered design professional in responsible charge, stating that the work was performed in accordance with the approved construction documents. The certificate of compliance shall also be made available to the Building Official upon request.

***Section 2901.1; add a sentence to read as follows:***

**[P] 2901.1 Scope.** Plumbing fixtures shall be provided in the minimum number as shown in Table 2902.1 based on the actual use of the building or space. Uses not shown in Table 2902.1

shall be considered individually by the code official. The number of occupants shall be determined by this code. The provisions of this Chapter are meant to work in coordination with the provisions of Chapter 4 of the International Plumbing Code. Should any conflicts arise between the two chapters, the Building Official shall determine which provision applies.

***Section 2902.1; add a second paragraph to read as follows:***

In other than E Occupancies, the minimum number of fixtures in Table 2902.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduced number and approved by the Building Official.

***Table 2902.1; add 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 of 25 or less, and for dining and/or drinking establishments.

***Section 2902.1.3; add new Section 2902.1.3 to read as follows:***

**2902.1.3 Additional fixtures for food preparation facilities.** In addition to the fixtures required in this Chapter, all food service facilities shall be provided with additional fixtures set out in this section.

**2902.1.3.1 Hand washing lavatory.** At least one hand washing lavatory shall 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 sink.** In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tool and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the **Rowlett** Health Department

***Section 3001 is amended by adding the following:***

**3001.5 Conflicts.** If there is a conflict between state law, the International Building Code or local code amendments, the most restrictive provision shall apply.

***Section 3002.1 Hoistway Enclosure Protection add exceptions to read as follows:***

**Exceptions:**

1. Elevators wholly located within atriums complying with Section 404 shall not require hoistway enclosure protection.
2. Elevators in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall not require hoistway enclosure protection.

***Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces is amended to read as follows:***

**Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces**

Elevator machine rooms, control rooms, control spaces 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.

**Exceptions:**

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

***Section 3005.7; add a Section 3005.7 as follows:***

**3005.7 Fire Protection in Machine rooms, control rooms, machinery spaces and control spaces.**

**3005.7.1 Automatic sprinkler system.** The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.7.2.1.

**3005.7.2.1 Prohibited locations.** Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoist-ways.

**3005.7.2.2 Sprinkler system monitoring.** The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

**3005.7.3 Water protection.** An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.

**3005.7.4 Shunt trip.** Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

***Section 3005.8; add section 3005.8 to read as follows:***

**Section 3005.8 Storage.** Storage shall not be allowed within the elevator machine room, control room, machinery spaces or control spaces. Provide appropriate signage at each entry to the above listed locations stating: "No Storage Allowed".

***Section 3006.2, Hoistway opening protection required is amended to read as follows:***

**Section 3006.2, Hoistway opening protection required** Elevator hoistway door openings shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three stories, is required to be enclosed within a shaft enclosure in accordance with Section 712.1.1 and any of the following conditions apply:

1. The building is not protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
2. The building contains a Group I-1 Condition 2 occupancy.

3. The building contains a Group I-2 occupancy.
4. The building contains a Group I-3 occupancy.

5. The building is a high rise and the elevator hoistway is more than 55 feet (16 764 mm) in height. The height of the hoistway shall be measured from the lowest floor at or above grade to the highest floors served by the hoistway.

***Section 3109.1; change to read as follows:***

**3109.1 General.** Swimming pools shall comply with the requirements of sections 3109.2 through 3109.5 and other applicable sections of this code and complying with applicable state laws.

***Section 3305 is amended by adding the following:***

**3305.2 Trash Containment.** Contractors shall ensure that every construction, remodel, repair, or renovation site has a method of containment for trash and debris. The contractor shall ensure that the trash and debris is removed from the site on a regular basis so that the site is maintained in a clean, sanitary, dust free, and safe condition at all times.

**3305.3 Sanitary Facilities.** Contractors shall ensure that every construction, remodel, repair, or renovation site has adequate sanitary facilities for all workers. The contractor shall ensure that these facilities are kept in a clean and sanitary condition at all times.

**3305.4 Street Cleaning.** Adjacent streets to the construction site shall be maintained and free of dirt, mud, rocks and other construction debris at all times.

**3305.5 Spoils piles.** Visible (full or partial) spoils piles located within fifty feet of a public ROW shall not exceed eight feet in height. The City maintains discretion in the management of spoils pile volume and foot print, which shall be minimized. Seeding undisturbed portions of the pile is required in accordance with all applicable TPDES regulations.

**3305.6 Jobsite Management.** The Building Official shall have approval of all staging areas for jobsites where there are site constraints that may affect the surrounding areas.

**3305.7 Truck Routes.** The Building Official shall have approval of all truck routes within the City Limits used for construction purposes such as excavation transport, ready-mix pour, etc.