

# Recommended Amendments to the 202148 International Building Code

North Central Texas Council of Governments Region

The following sections, paragraphs, and sentences of the 202148 International Building Code are hereby amended as follows: Standard type is text from the IBC. <u>Underlined type is text inserted.</u> Lined through type is deleted text from IBC. A double asterisk (\*\*) at the beginning of a section identifies an amendment carried over from the 201815 edition of the code and a triple asterisk (\*\*\*) identifies a new or revised amendment with the 202118 code.

## Explanation of Options A and B:

Please note that as there is a wide range in fire fighting philosophies / capabilities of cities across the region, OPTION "A" and OPTION "B" are provided in the Fire and Building Code amendments. Jurisdictions should choose one or the other based on their fire fighting philosophies / capabilities when adopting code amendments.

### \*\*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, <u>when specifically adopted</u>, shall be considered part of the requirements of this code to the prescribed extent of each such reference. <u>Whenever amendments have been adopted to the reference dodes 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 Electrical Code as adopted.</u>

(Reason: Legal wording to recognize locally adopted codes and amendments adopted with referenced codes. The former ICC Electrical Code is now Appendix K-Chapter 27 of this code but no longer called by that name.)

### \*\*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.

(Reason: This was dropped when ICC quit publishing the ICC Electrical Code, but the Electrical Code still should be referenced regardless of how it is adopted.)

\*\* Section 103 and 103.1; amend to insert the Department Name

DEPARTMENT OF BUILDING SAFETY [INSERT OFFICIAL BUILDING DEPARTMENT NAME OF JURISDICTION]

103.1 Creation of enforcement agency. The Department of Building Safety [INSERT OFFICIAL BUILDING DEPARTMENT NAME OF JURISDICTION] is hereby created and the official in charge thereof shall be known as the building official:

(Reason: Reminder to be sure ordinance reads the same as designated by the city.)

\*\*\*Sections 101.1 and 103.1 should be adopted using the name of the jurisdiction. Also a reference in Chapter 16 (1612.3)



\*\*\*Section [A] 104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. (Jurisdictions may consider the option to amend or delete depending on local enforcement and flood hazard ordinances.)

(Reason: Flood hazard ordinances may be administered by other departments within the city.)

\*\*Section 104.10.1; Flood hazard areas. (Jurisdictions may consider the option to amend or delete depending on local enforcement and flood hazard ordinances.)

(Reason: Flood hazard ordinances may be administered by other departments within the city.)

Note: Sections 104.2.1, 104.10.1, 110.3.12.1, 1612, and 3114 are all inter-connected related to flood hazard areas, and amendments or deletions should be considered as a whole.

\*\*Section 105.2 Work exempt from permit; under sub-title entitled "Building" delete items 1, 2, 10 and 11 and re-number as follows:

## **Building:**

- One-story detached accessory structures used as tool and storage sheds, playhouses and similar
  uses, provided the floor area does not exceed 120 square feet (11 m<sub>2</sub>).
- 2. Fences not over 7 feet (1829 mm) high.
- 3. 1. (Remainder Unchanged)
- 4. 2. (Remainder Unchanged)
- 5. 3. (Remainder Unchanged)
- 6. <u>4.</u> (Remainder Unchanged)
- 7. <u>5.</u> (Remainder Unchanged)
- 8. <u>6.</u> ( Remainder Unchanged)9. <u>7.</u> (Remainder Unchanged)
- 10. Shade cloth structures constructed for nursery or agricultural purposes, not including service
- 11. 8. (Remainder Unchanged)
- 42. 9. (Remainder Unchanged)
- 13. 10. (Remainder Unchanged)

(Reason: Items deleted are for one- and two-family dwellings regulated by the International Residential Code. Accessory structures, fences and shade cloth structures would require a permit for commercial properties to ensure compliance with local ordinance, egress, accessibility, flame spread of fabric, wind/snow design load, etc.)

\*\*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:
- 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.

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

(Reason: This fee is not a fine or penalty but is designed to compensate for time and trips when inspections are called for when not ready.)

\*\*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.

(Reason: This fee is not a fine or penalty but is designed to compensate for time and to remove incentive to attempt to evade permits and code compliance. Text taken from former Uniform Administrative Code.)

\*\*\*This change removed because section 109 has been amended, and these issues are addressed in the code without requiring a change

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

Exception: Gypsum board and gypsum panel products that are not part of a fire resistance rated assembly or a shear assembly.

(Reason: Lath or gypsum board inspections are not typically performed in this area.)

Deleting the exception would then require all gypsum panels to be inspected; this issue is resolved by leaving the exception intact.

\*\*\*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 persons who are rendered incapable of self-preservation by the services provided or staff has accepted responsibility for care recipients already incapable. This group may include but not be limited to the following:

- Dialysis centers
- Sedation dentistry



- Surgery centers
- Colonic centers
- Psychiatric centers

(Reason: To clarify the range of uses included in the definition. [Explanatory note related to **Ambulatory Care Facilities**: This group of uses includes medical or dental offices where persons are put under for dental surgery or other services. Section 903.2.2 will now require such uses to be sprinkle red if on other than the floor of exit discharge or if four or more persons are put under on the level of exit discharge. Recommend (1.) jurisdictions document any pre-existing non-conforming conditions prior to issuing a new C of O for a change of tenant and, (2.) On any medical or dental office specify on C of O the maximum number of persons permitted to be put under general anesthesia. It is recommended that before a Certificate of Occupancy is issued, a letter of intended use from the business owner shall be included and a C of O documenting the maximum number of care recipients incapable of self preservation allowed.)

\*\*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.

(Reason: The code references Assisted Living facilities and definition was deleted.)

\*\*Section 202; change definition of "Atrium" as follows:

ATRIUM. An opening connecting two three or more stories... {Balance remains unchanged}

(Reason: Accepted practice in the region based on legacy codes.)

Note: The definition of Atrium was changed in the 2021 IBC back to three stories, and two stories only in I-2 and I-3 occupancies.

\*\*\*Section 202; add amend 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.

(Reason: The code references aligns with fire code.)

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

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

(Reason: The registered design professional in responsible charge should be included.)

Option A

\*\*Section 202; {No amendment necessary}



### Option B

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

**HIGH-RISE BUILDING.** A building with an occupied floor located more than 75 55 feet (22.860 mm) (16.764 mm) above the lowest level of fire department vehicle access.

(Reason: To define high-rise, as it influences sprinkler requirement thresholds based on the fire fighting capabilities of a jurisdiction.)

\*\*\*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 Chapters 10 and 11.

(Reason: To clarify that egress and accessibility requirements are applicable for assembly areas, i.e. cafeteria, auditoriums, etc.)

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

Fire stations

Police stations with detention facilities for 5 or less

(Reason: Consistent with regional practice dating back to the legacy codes.)

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

4. Cleaning establishments... {Text unchanged} ...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.

(Reason: To call attention to detailed requirements in the Fire Code.)

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

3. The open air portion of a building [remainder unchanged]

(Reason: To clarify enclosed portions are not exempt.)

\*\*\*Section 403.3, DeleteExceptionexception; delete item 2.

(Reason: To provide adequate fire protection to enclosed areas.)

\*\*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 420 120 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: {No change to exception.}



(Reason: The 2009 edition of the IFC added this requirement based on a need for redundancy of the water supply similar to the redundancy of the power supply to the fire pumps required for such tall buildings, partially due to the fact that these buildings are rarely fully evacuated in a fire event. More commonly, the alarm activates on the floor of the event, the floor above and the floor below. Back-up power to the fire pump becomes critical for this reason. Certainly, the power is pointless if the water supply is impaired for any reason, so a similar requirement is provided here for redundant water supplies. The 2015 edition changed the requirement to only apply to very tall buildings over 420 ft. This amendment modifies/lowers the requirement to 120 ft., based on this same height requirement for fire service access elevators. Again, the language from the 2009 and 2012 editions of the code applied to any high-rise building. This compromise at 120 ft. is based on the above technical justification of defend-in-place scenarios in fire incidents in such tall structures.)

Note: This section changed in the 2021 IBC to reference ALL buildings over 420 ft. in height, and Type IV-A and IV-B buildings over 120 ft. This should be discussed with the Fire Code subcommittee to determine their intent to keep or modify this language in the 2021 code.

# \*\*Section 404.5; delete Exception.

(Reason: Consistent with amended atrium definition.)

Note: This has been resolved with the change of definition for Atriums and the other changes related in Section 404.5 under smoke control.

Section 404.10 Exit Stairways in an atrium. Where an atrium contains an interior exit access stairway all the following

shall be met:

1. - 5. Unchanged.

Reason: The five provisions within Section 404.10 are applicable to exit access stairways, not interior exit stairways. As printed, this is an error, that if left uncorrected, would change among other core code provisions, how to measure travel distance to an enclosed exit stairway. There is use of the terms "exit stairway in an atrium" vs. "interior exit stairway" vs. "exit access stairway" that will cause confusion as to which provisions are applicable.

### \*\*Section 406.3.3.1 Carport separation; add sentence to read as follows:

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).

(Reason: Simplifies the fire separation distance and eliminates the need to obtain opening information on existing buildings when adding carports in existing apartment complexes. Consistent with legacy codes in effect in region for years and no record of problems with car fires spreading to apartments as a result.)

# \*\*\*Section 503.1.; add sentence to read as follows: 503.1. General. [Existing Text to remain]

Where a building contains more than one distinct type of construction, the building shall comply with the most restrictive area, height, and stories, for the lesser type of construction or be separated by fire walls, except as allowed in Section 510.

(Reason: To create definite language that requires separation between dissimilar building types.)

### \*\*\*Table 506.2; delete sentence from table

I. The maximum allowable area for a single-story non sprinklered Group U greenhouse is permitted to be 9000 square feet or the allowable area shall be permitted to comply with Table C102.1 of Appendix C.



(Reason: To eliminate the need for Appendix C adoption and remain consistent with 6000 sq. ft. sprinklering provision.)

\*\*Section 506.3.1; add sentence to read as follows:

### **506.3.1 Minimum percentage of perimeter**. [Existing Text remains]

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.

(Reason: To define what is considered accessible. Consistent with regional amendment to IFC 504.1.)

VERIFY IFC 504.1 SECTION

\*\*\*Section 602.1.1; add sentence to read as follows:

### 602.1.1 Minimum Requirements. [Existing Text to remain]

Where a building contains more than one distinct type of construction, the building shall comply with the most restrictive area, height, and stories, for the lesser type of construction or be separated by fire walls.

(Reason: To create definite language that requires separation between dissimilar building types.)

\*\*\*Section 708.4.2; change sentence to read as follows:

# 708.4.2 Fireblocks and draftstops in combustible construction. [Body of text unchanged]

## **Exceptions:**

1. Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that sprinkler protection is provided in the space between the top of the fire partition and the underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1. Portions of buildings containing concealed spaces filled with noncombustible insulation as permitted for sprinkler omission shall not apply to this exception for draftstopping. [Remainder unchanged]

Reason: (The most common exception used to eliminate the need for sprinklers in concealed spaces of combustible construction is to fill the space with noncombustible insulation. This exception was changed in 2010 to permit a 2-inch air gap at the top of the filled space. A space compliant with the permitted omission above would allow hot gas and smoke to spread unimpeded throughout a building not provided with draftstopping. For this reason, omission of sprinklers permitted in accordance with NFPA 13 referenced standard should not be permitted with IBC exception requiring draftstopping in combustible construction.)

\*\*\*Section 718.3; change sentence to read as follows:

## **718.3 Draftstopping in floors.** [Body of text unchanged]

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

(Reason: To remain consistent with changes in 708.4.2 code.) CONSULT W/ FIRE TO VERIFY IF NEEDED



\*\*\*Section 718.4; change sentence to read as follows:

### 718.4 Draftstopping in attics. [Body of text unchanged]

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

(Reason: To remain consistent with changes in 708.4.2 code.) CONSULT WITH FIRE TO VERIFY IF NEEDED

\*\*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 or inspected by approved camera when foreign material is present or when caps are missing, 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.
- 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.
- 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.

(Reason: Increases the reliability of the fire protection system and re-emphasizes the requirements of NFPA 25 relative to standpipe systems, as well as ensuring that FDC connections are similarly tested/maintained to ensure operation in an emergency incident.)

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

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

(Reason: Such alternative systems do not provide the reliability of automatic sprinkler protection. Most gaseous type systems are highly susceptible to open doors, ceiling or floor tile removal, etc. However, an applicant could pursue an Alternate Method request to help mitigate the reliability issues with these alternative systems with the fire code official if so desired, or there may be circumstances in which the fire code official is acceptable to allowing an alternate system in lieu of sprinklers, such as kitchen hoods or paint booths.)

### \*\*Section 903.2; add paragraph to read as follows and delete the exception:

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."

(Reason: Firefighter and public safety. This amendment eliminates the shunt trip requirement of the International Building Code Section 3005.5 for the purpose of elevator passenger and firefighter safety. This amendment is contingent on the Building Code amendment eliminating the Exceptions to Section 3005.4, such that passive fire barriers for these areas are maintained. The exception deletion is due to the fact that such telecom areas pose an undue fire risk to the structural integrity of the building.)

# \*\*Section 903.2.9; add Section 903.2.9.3 to read as follows:

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

(Reason: Fire departments are unable to inspect these commercial occupancies and are unaware of the contents being stored. Previous allowance to separate units by fire barriers is difficult to enforce maintenance after opening.)

# \*\*\*Section 903.2.10; Group S-2 parking garages.

3. Where the fire area of the open parking garage in accordance with Section 406.5 exceeds 48,000 square feet or 10 foot fire access on one open side adjacent to the parking garage.

(Reason: Provide Fire department better access in lieu of sprinklers)

# \*\*Option A

Section 903.2.11; change 903.2.11.3 and add 903.2.11.7 and 903.2.11.8, as follows:



903.2.11.3 Buildings 55 Feet or more in Height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more, other than penthouses in compliance with Section 1510 of the *International Building Code*, located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor. Exceptions:

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

2. Occupancies in Group F-2.

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.

### \*\*Option B

Section 903.2.11; change 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:

903.2.11.3 Buildings 55 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more, other than penthouses in compliance with Section 1510 of the *International Building Code*, located 55 35 feet (46 764 10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

# Exceptions:

- 4.—Open parking structures in compliance with Section 406.5 of the *International Building Code, having no other occupancies above the subject garage.*
- 2. Occupancies in Group F-2.
- 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 6,000 sq. ft. An automatic sprinkler system shall be installed throughout all buildings with a building area 6,000 sq. ft. or greater and in all existing buildings that are enlarged to be 6,000 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*.

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

**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 ... *{text unchanged}*... 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.

- Generator and transformer rooms, <u>under the direct control of a public utility</u>, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fireresistance rating of not less than 2 hours.
- 4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.
- Fire service access Elevator machine rooms, and machinery spaces, and hoistways, other than
  pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
- 6. {Delete.}

(Reason: Gives clarification. Exception 4 deleted to provide protection where fire risks are poorly addressed. Amendment 903.2 addresses Exception 5 above relative to the elimination of sprinkler protection in these areas to avoid the shunt trip requirement.)

\*\*\*Section 903.3.1.2; delete item to read as follows: 903.3.1.2 NFPA 13R Sprinkler Systems.

- 2. The floor level of the highest story is 30 feet or less above the lowest level of fire department vehicle access.
- 3. 2. The floor level of the lowest story is 30 feet or less below the lowest level of fire department vehicle access

(Reason: To continue to allow 4 story Group R buildings with continued use of NFPA 13R.)

\*\*\*Section 903.3.1.2.3;-amend as follows: delete sections and replace as follows:

[F] Section 903.3.1.2.3 Attached Garages and Attics. Sprinkler protection is required in attached garages, and in the following attic spaces:

- [Remainder Unchanged]
- 2. [Remainder Unchanged]
- Attic spaces of bBuildings of combustible construction with attic spaces that are two or more stories in height above grade plane or above the lowest level of fire department vehicle access.
- Group R-4, Condition 2 occupancy attics not required by Item 1 or 3 to have sprinklers shall comply with one of the following: [Remainder Unchanged]

(Reason: Attic protection is required due to issues with fire exposure via soffit vents, as well as firefighter safety. Several jurisdictions indicated experience with un-protected attic fires resulting in displacement of all building occupants. NFPA 13 provides for applicable attic sprinkler protection requirements, as well as exemptions to such, based on noncombustible construction, etc.—Attached garages already require sprinklers via NFPA 13R—this amendment just re-emphasizes the requirement.)

\*\*\*Section 903.3.1.2.4 Attached Garages. Sprinkler protection is required in attached garages accessory to Group R occupancies required to be sprinklered.

(Reason: Attached garages already require sprinklers via NFPA 13R – this amendment just re-emphasizes the requirement.)

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

**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.

**Commented [CC1]:** Same comment on how the "unchanged" is formatted. It even seems different within this same document.



(Reason: To allow the use of the Plumbing section of the International Residential Code (IRC) and recognize current state stipulations in this regard.)

### \*\*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:

- 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.

(Reason: In the last few years, severe winters brought to light several issues with current practices for sprinklering attics, not the least of which was wet-pipe sprinklers in ventilated attics provided with space heaters, etc. for freeze protection of such piping. This practice is not acceptable for the protection of water-filled piping in a ventilated attic space as it does not provide a reliable means of maintaining the minimum 40 degrees required by NFPA, wastes energy, and presents a potential ignition source to the attic space. Listed antifreeze is specifically included because NFPA currently allows such even though there is no currently listed antifreeze at the time of development of these amendments. The intent of this amendment is to help reduce the large number of freeze breaks that have occurred in the past with water-filled wet-pipe sprinkler systems in the future, most specifically in attic spaces.)

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

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.

(Reason: To define uniform safety factor for the region.)

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

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.

(Reason: To avoid significant water losses. Consistent with amendment to IFC 905.9.)

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



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.

(Reason: Fire department connections are not always located at the riser; this allows the fire department faster access.)

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

**905.2 Installation Standard.** Standpipe systems shall be installed in accordance with this section and NFPA 14. <u>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.</u>

(Reason: To define manual dry standpipe supervision requirements. Helps ensure the integrity of the standpipe system via supervision, such that open hose valves will result in a supervisory low air alarm.)

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

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:**

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

(Reason: Allows for the rapid deployment of hose lines to the body of the fire. Manual dry option added this edition.)

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

- In every required interior exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at the main floor landing between stories, unless otherwise approved by the fire code official.
- 2. {No change.}
- 3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

**Exception:** Where floor areas adjacent to an exit passageway are reachable from an interior exit stairway hose connection by a {No change to rest.}

- 4. {No change.}
- 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 a hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with stair access to the roof provided in accordance with Section 1011.12.
- 6. {No change.}
- 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.



(Reason: Item 1, 3, and 5 amendments to remove 'interior' will help to clarify that such connections are required for all 'exit' stairways, to ensure firefighter capabilities are not diminished in these tall buildings, simply because the stair is on the exterior of the building. Item 5 reduces the amount of pressure required to facilitate testing, and provides backup protection for fire fighter safety. Item 7 allows for the rapid deployment of hose lines to the body of the fire.)

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

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.

(Reason: To avoid significant water losses. Consistent with amendment to IFC 903.4.)

\*\*Section 907.1; add Section 907.1.4 to read as follows:

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.

(Reason: Provides for the ability of descriptive identification of alarms, and reduces need for panel replacement in the future. Updated wording to match the language of the new requirement at 907.5.2.3. Change of terminology allows for reference back to definitions of NFPA 72.)

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

**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 where the <a href="having an">having an</a> occupant load due to the assembly occupancy is of 300 or more persons, or where the Group A occupant load is 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: {No change.}

Activation of fire alarm notification appliances shall:

- 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.

(Reason: Increases the requirement to be consistent with Group B requirement. Also addresses issue found in Group A occupancies of reduced lighting levels and other A/V equipment that distracts from fire alarm notification devices or reduces ability of fire alarm system to notify occupants of the emergency condition.)

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

**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 <u>educational</u> occupancies. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. <u>An approved smoke detection system shall be installed in Group E day care occupancies</u>. 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. {No change.}
  - 1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.) (No change to remainder of exceptions.)

(Reason: To distinguish educational from day care occupancy minimum protection requirements. Further, to define threshold at which portable buildings are considered a separate building for the purposes of alarm systems. Exceptions provide consistency with State law concerning such occupancies.)

## \*\*Section 907.2.12, Exception 3; change to read as follows:

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.

(Reason: To indicate that enclosed areas within open air seating type occupancies are not exempted from automatic fire alarm system requirements.)

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

907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

(Reason: Helps to reduce false alarms.)

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

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.

(Reason: To provide uniformity in system specifications and guidance to design engineers. Improves reliability of fire alarm devices and systems.)

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

(Reason: To assist responding personnel in locating the emergency event for all fire alarm systems.)

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

See 907.6.3 for the required information transmitted to the supervising station.

(Reason: To assist responding personnel in locating the emergency event for all fire alarm systems.)



(Reason: Deleted Previous code amendment Section 909.22, For removal because it is already in the code in Sections 909.20.5, 909.20.6, 909.20.6.1, 909.20.6.2, and 909.20.6.3.)

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

- Only manual smoke and heat removal shall net be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. <u>Automatic smoke and heat removal is prohibited.</u>
- Only manual smoke and heat removal shall net be required in areas of buildings equipped with
  control mode special application sprinklers with a response time index of 50(m\*S)<sup>1/2</sup> or less that are
  listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat
  removal is prohibited.

(Reason: Allows the fire department to control the smoke and heat during and after a fire event, while still prohibiting such systems from being automatically activated, which is a potential detriment to the particular sprinkler systems indicated.)

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

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

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

Exception: Buildings of noncombustible construction containing only noncombustible materials.

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.

(Reason: Maintains a fire protection device utilized in such occupancies where it is sometimes necessary to allow chemicals to burn out, rather than extinguish.)

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

**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.

**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 systems per Section 910.2.

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.



(Reason: Amendment continues to keep applicable wording from prior to the 2012 edition of the IFC. Specifically, automatic activation criteria is no longer specifically required in the published code. Specifying a temperature range at which smoke and heat vents should activate in sprinklered buildings helps to ensure that the sprinkler system has an opportunity to activate and control the fire prior to vent operation.)

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

**910.4.3.1 Makeup Air.** Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be manual or automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m2 per 0.4719 m3/s) of smoke exhaust.

(Reason: Makeup air has been required to be automatic for several years now in this region when mechanical smoke exhaust systems are proposed. This allows such systems to be activated from the smoke control panel by first responders without having to physically go around the exterior of the building opening doors manually. Such requires a significant number of first responders on scene to conduct this operation and significantly delays activation and/or capability of the smoke exhaust system.)

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

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.

(Reason: To accommodate limited hose lengths, improve response times where the FDC is needed to achieve fire control, and improve ease of locating a fire hydrant in those situations also. Also, consistent with NFPA 14 criteria.)

## \*\*\*Section 913.2.1; add Section 913.2.1.1 and exception to read as follows:

913.2.1.1 Fire Pump Room Access. 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 IFC 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 IFC Section 506.1.

(Reason: This requirement allows fire fighters safer access to the fire pump room. The requirement allows access without being required to enter the building and locate the fire pump room interior access door during a fire event. The exception recognizes that this will not always be a feasible design scenario for some buildings, and as such, provides an acceptable alternative to protect the pathway to the fire pump room.)

Section 1006.2.1; Egress based on occupant load and common path of egress travel distance. Two exits or exit doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1. The cumulative occupant load from adjacent rooms, areas or space shall be determined in accordance with Section 1004.2. Exceptions:

- 1. Unchanged
- 2. Unchanged



Unoccupied <u>rooftop</u> mechanical rooms and penthouses are not required to comply with the common path
of egress travel distance measurement.

(Reason: Add "rooftop" to Exception No. 3 to clarify that only such mechanical rooms located on the roof maybe exempted.)

\*\*Section 1006.2.2.7; add Section 1006.2.2.7 as follows:

<u>1006.2.2.7 Electrical Rooms.</u> For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.

(Reason: Cross reference necessary for coordination with the NEC which has exiting requirements as well.)
NO LONGER NEEDED DUE TO 1006.2.2.4

\*\*Section 1009.8; add the following Exception 7:

**1009.8 Two Way Communication.** A two-way communication system complying with Sections 1009.8.1 and 1009.8.2 shall be provided at the landing serving each elevator required to be accessible on each accessible floor that is one or more stories above or below the level of exit discharge.

### **Exceptions:**

7. Buildings regulated under State Law and built in accordance with State registered plans, including variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter 11.

(Reason: To accommodate buildings regulated under Texas State Law and to be consistent with amendments in Chapter 11.)

\*\*Section 1010.1.9.5 Bolt Locks; amend exceptions 3 and 4 as follows:

# **Exceptions:**

- 3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F,  $\underline{M}$  or S occupancy. (remainder unchanged)
- 4. Where a pair of doors serves a Group A, B, F, M or S occupancy (remainder unchanged)

(Reason: Application to M occupancies reflects regional practice; No. 4 expanded to Group A due to it being a similar scenario to other uses; No. 4 was regional practice.)

# \*\*Section 1010.2.5 Bolt Locks; amend exceptions 3 and 4 as follows: Exceptions:

- 3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, Mor S occupancy. (remainder unchanged)
- 4. Where a pair of doors serves a Group  $\underline{A}$ , B, F,  $\underline{M}$  or S occupancy (remainder unchanged)

(Reason: It is common in our region to see the 2nd leaf locked, when that leaf is not part of the required egress door clear width, such as in a typical Group M. Exception No. 4 was expanded to Group A due to it being a similar situation for Group A restaurants.)

\*\*Section 1020.2 Construction; add new exception 6 as follows:

6. In unsprinklered 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 smokedetection within the corridor. The actuation of any detector must activate self-annunciating alarms audible

Commented [CC2]: Same comment.



in all areas within the corridor. Smoke detectors must be connected to an approved automatic fire alarm system where such system is provided.

Reason: Similar concept was previously in UBC. This scenario occurs primarily in existing, non-sprinklered buildings, which under current IBC would be required to have a fire resistance rated corridor. New exception provides a cost-effective solution for single tenant space in lieu of the base IBC requirement to retrofit a fire sprinkler system throughout the building.

### \*\*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 must activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors must be connected to an approved automatic fire alarm system where such system is provided.

(Reason: Regionally accepted alternate method.)

\*\*Section 1020.2 Construction: add exception 6 to read as follows:

6. In existing 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 must activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors must be connected to an approved automatic fire alarm system where such system is provided.

(Reason: Similar concept was previously in UBC. This scenario occurs primarily in existing, non-sprinklered buildings, which under current IBC would be required to have a fire resistance rated corridor. New exception provides a costeffective solution for single tenant space in lieu of the base IBC requirement to retrofit a fire sprinkler system throughout the building.)

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

(Reason: Unenforceable.)

\*\*Section 1030.1.1.1 Spaces under grandstands and bleachers.

Exception No. 4: Where alternate means or methods are submitted to and approved by the Building and Fire Officials.

Reason: This base IBC provision applies to all grandstands and bleachers and does not differentiate between open air grandstands & bleachers, smaller, less complex grandstands and bleachers and or movable/non-fixed grandstands and bleachers. The new exception permits the AHJ to be presented with alternate means or methods that take into consideration these differentiators that are unique to the specific grandstand and or bleacher.

\*\*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.



(Reason: To accommodate buildings regulated under state law. Further clarified in 2015 to mean components that are specifically addressed by TDLR shall be exempt.)

## \*\*\*Section 1809.5.1; delete :

1809.5.1 Frost Protection at required exits. Frost protection shall be provided at exterior landing for all required exits with outward-swing doors. Frost protection shall only be required to the extent necessary to ensure the unobstructed opening of the required exit doors.

(Reason: frost protection at exit doors is not needed in our climate zone )

## \*\*\*Section 2702; add Section 2702.5 to read as follows:

2702.5 Designated Critical Operations Areas (DCOA) In areas within a facility or site requiring continuous operation for the purpose of public safety, emergency management, national security or business continuity, the power systems shall comply with NFPA 70 Article 708.

(Reason: Identifying these areas of critical operations in the building code ensures designers are advised of the requirements outlined in the National Electrical Code which defines specific Critical Operations Power System (COPS) requirements.) Michael

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

**[P] 2901.1 Scope.** (existing text to remain) 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.

(Reason: Gives building official discretion.)

# \*\*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.

(Reason: To allow flexibility for designer to consider specific occupancy needs.)

\*\*Table 2902.1; add footnote g to read as follows: (readdress for Covid - coordinate with plumbing)

g. 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.

\*\*Table 2902.1; add footnote g to read as follows:

g. 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.

(Reason: Adjustment meets the needs of specific occupancy types.)

# \*\*Add new Section 2902.1.4 to read as follows:

**2902.1.4** 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.



**2902.1.4.1** 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.

**2902.1.4.2 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 **<Jurisdiction's>** health department.

(Reason: Coordinates Health law requirements with code language for consistent regional practice.)

\*\*\*Section 3001.2 Emergency Elevator Communication Systems for the deaf, hard of hearing and speech impaired; delete this section.

(Reason: Per Elevator manufacturers input, they were not consulted prior to code approval and technology of elevator provisions as submitted are not currently available to provide this feature.)

NO LONGER NEEDED DUE TO REWRITE OF 3001.2 (above)

\*\*\*Section 3002.1 Hoistway Enclosure Protection required. Add exceptions to Section 3002.1 as follows:

### **Exceptions:**

- 1. Elevators completely located within atriums shall not require hoistway enclosure protection.
- 4.2. Elevators in open or enclosed parking garages that serve only the parking garage, shall not require hoistway enclosure protection.

(Reason: Provides specific Code recognition that elevators within atriums and within parking garages do not require hoistway enclosure protection. Amendment needed since specific Code language does not currently exist.)

### (Part 1) NO LONGER NEEDED DUE TO REWRITE OF 3005.4

\*\*Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces; delete text

Elevator machine rooms, control rooms, control spaces and machinery spaces outside of but attached to a hoistway that have openings into the hoistway shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.

# Revise text to read:

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.

(Remainder unchanged)

(Reason: This amendment eliminates code language to be consistent with the regional goal to require passive enclosures of these areas unless a hoistway enclosure is not required by other Code provisions. See companion change to eliminate fire sprinklers thereby eliminating shunt trip.)

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

Delete exceptions and add two new exceptions to Section 3005.4 as follows:



### Exceptions:

- Elevator machine rooms, control rooms, machinery spaces and control spaces completely located within atriums shall not require enclosure protection.
- 2. Elevator machine rooms, control rooms, machinery spaces and control spaces in open or enclosed parking garages that serve only the parking garage, shall not require enclosure protection.

(Reason: This amendment eliminates the Exceptions to Section 3005.4 such that passive enclosures for these areas are to be provided and maintained. The fire rating of these enclosures is permitted to be omitted by the above added exceptions where allowed by other provisions of the code such as in atriums and parking structures. See companion change to eliminate fire sprinklers to eliminate the need for shunt trip system.)

\*\*Section 3005.5: Add a new subsection to Section 3005.5.1 as follows:

3005.5.1 Fire Protection in Machine rooms, control rooms, machinery spaces and control spaces.

3005.5.1.1 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 3005.5.1.1.1.

3005.5.1.1.1 Prohibited locations. Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoistways.

3005.5.1.1.2 Sprinkler system monitoring. The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

3005.5.1.2 Water protection. An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.

3005.5.1.3 Omission of Shunt trip. Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

(Reason: Firefighter and public safety. This amendment eliminates the shunt trip requirement of the International Building Code Section 3005.5 for the purpose of elevator passenger and firefighter safety. The new section above is intended to be identical to Sections 3007.2, 3007.3, and 3007.4 for Fire Service Access Elevators and Sections 3008.2, 3008.3 and 3008.4 for Occupant Evacuation Elevators.)

\*\*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 hoistways.

Commented [SL3]: IBC Task Group 3 question to IFC Task Group 3 to allow the removal of the shunt trip system in non-FSES and non-OEE elevators. Proposed section 3005.5.1 basically addresses elevators that service belowgrade levels and those elevators operating to just under the 120' threshold for FSES's, i.e., standard (traditional) high-rise building and below. Does the IFC committee wish to bring other provisions of FSES and OEE's forward into 3005.5.1 that would be applicable to such buildings? For example, i.e., such as increa carrying capacity? Increasing the elevator cab dimensions?



<u>3005.7.2.2 Sprinkler system monitoring.</u> 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.

(Reason: Firefighter and public safety. This amendment eliminates the shunt trip requirement of the International Building Code Section 3005.5 for the purpose of elevator passenger and firefighter safety. The new section above is intended to be identical to Sections 3007.2, 3007.3, and 3007.4 for Fire Service Access Elevators and Sections 3008.2, 3008.3 and 3008.4 for Occupant Evacuation Elevators.)

\*\*Section 3005.8; add Section 3005.8 as follows:

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

(Reason: Reinforces the need to maintain space clean and free of combustibles. See companion change to eliminate fire sprinklers therein, Section 3005.5.1.)

## Option A

Section 3006.2, Hoistway opening protection required; Insert new text as follows:

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

### Option E

Section 3006.2, Hoistway opening protection required; Revise text as follows:

5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 mm) 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."

(Reason: 2018 IBC text does not address hoistways that are greater than 75'-0" in height that are both below grade and above grade but not located above the high rise classification nor does the IBC address hoistways wholly located above grade such as those that serve sky lobbies".)

\*\*Section 3007.3 and Section 3008.3: Revise text by deleting "enclosed" as follows:

3007.3 Water Protection. Water from the operation of an automatic sprinkler system outside the enclosed lobby shall be prevent from infiltrating into the hoistway enclosure in accordance with an approved method.



3008.3 Water Protection. Water from the operation of an automatic sprinkler system outside the enclosed lobby shall be prevent from infiltrating into the hoistway enclosure in accordance with an approved method.

[Reason: The lobbies for FSAE and or OEE elevators may be open (i.e., at ground level), or may not require a lobby enclosure on those upper floors with secondary cab entry doors opening into a nonrequired FSAE or OEE lobby. Regardless of whether or not the lobby is enclosed, the objective is to preclude fire sprinkler water from entering into the hoistway serving FSAE and OEE elevators. The deletion of "enclosed" clarifies the original intent of this provision and is consistent with ICC interpretations.)

- \*\*\* Sections 3101, 3102 & 3103 address the use of temporary membrane structures, such as tents. This should be made to be compatible with the IFC for consistency, and reviewed by individual jurisdictions for modifications if necessary.
- \*\*\* Section 3115 has been added to the code to include the use of intermodal shipping containers into the IBC. The entire Building Code group should discuss their use and any regulations that apply, so that any amendments made may be adoptable throughout the region. Verify the ICC-ES documents concerning shipping containers.

## \*\*\*Section [F] 3313 Water Supply for Fire Protection:

- (Section added)
  - Where Required soon as combustible material arrives on site,
  - Minimum fire flow 500 gals/min and fire hydrant within 500 ft of combustible building material
  - Vertical construction of Type II, IV, and V
  - Vertical construction of Type I and II
  - Standpipe supply

NEED INPUT FROM FIRE ADVISORY BOARD FOR ANY AMENDMENTS RECOMMENDATIONS NEEDED IF TO ENTIRE SECTION

End