Recommended Amendments to the 2003 International Building Code

North Central Texas Council of Governments region

The following sections, paragraphs, and sentences of the *2003 International Building Code* are hereby amended as follows: Standard type is text from the IBC. <u>Underlined type is text inserted.</u> <u>Lined through type is deleted text from IBC.</u> A double asterisk at the beginning of a section identifies an amendment carried over from the 2000 edition of the code and a triple asterisk identifies a new amendment with the 2003 code.

***Section 101.2, exception No. 2; change to read as follows:

2. Existing buildings undergoing repair, alterations or additions, and change of occupancy shall be permitted to comply with the *International Existing Building Code* with prior approval of the Building Official. Otherwise see chapter 34.

(Reason: Although the committee did not review the IEBC for local adoption, the committee did not want to prohibit its use for specific situations when careful consideration was given to its provisions.)

**Section 101.4; change to read as follows:

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.7 and referenced elsewhere in this code, when specifically adopted, shall be considered part of the requirements of this code to the prescribed extend 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 ICC *Electrical Code* shall mean the Electrical Code as adopted.

(Reason: Legal wording to recognize locally adopted codes and amendments adopted with referenced codes.)

**Section 109.3.5; delete.

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

Option A

**Section 202; add a new definition to read as follows:

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

Option B

**Section 202; add a new definition to read as follows:

<u>HIGH-RISE BUILDING.</u> A building having any floor used for human occupancy located more than 55 feet (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 302.1.1, change to read as follows:

302.1.1 Incidental use areas. Spaces which are incidental to the main occupancy shall be separated or protected, or both, in accordance with Table 302.1.1 or the building shall be classified as a mixed occupancy and comply with Section 302.3. Areas that are incidental to the main occupancy shall be classified in accordance with the main occupancy of the portion of the building in which the incidental use area is located.

Exception: Incidental use areas within and serving a dwelling unit are not required to comply with this section.

(Reason: To eliminate conflict between Section 302.3 exception #5 and Section 302.1.1)

***Section 302.2.1; change to read as follows:

302.2.1 Assembly areas. Accessory assembly areas are not considered separate occupancies if the floor area is equal to or less than 750 square feet (69.7 m2). Assembly areas that are accessory to Group E occupancies are not considered separate occupancies exempt from the separation requirements of Table 302.3.2 and are considered Group E occupancies only for the application of Table 503. {Last sentence to remain unchanged}

(Reason: The committee determined that the existing requirements for Group A occupancies should apply to assembly occupancies in schools.)

*****Table 302.3.2**; change the footnote reference in row **R-3**, **R-4**, column **U**, from "d" to "f" and add foot note "f" to read as follows:

f. See Section 406.1.4.

(Reason: Editorial; corresponds with regional amendment to 406.1.4.)

***Section 303.1; change to read as follows:

303.1 Assembly Group A. {1st four sentences to remain unchanged}. Assembly occupancies areas which are accessory to Group E in accordance with Section 302.2 are not considered assembly occupancies are exempt from the separation requirements of Table 302.3.2 and are considered Group E occupancies only for the application of Table 503. {Last sentence to remain unchanged}

(Reason: The committee determined that the existing requirements for Group A occupancies should apply to assembly occupancies in schools.)

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

Fire stations

Police stations with detention facilities for 5 or less

Option A

**Section 403.1; change to read as follows:

403.1 Applicability. The provisions of this section shall apply to buildings having <u>any</u> occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

Option B

**Section 403.1; change to read as follows:

403.1 Applicability. The provisions of this section shall apply to buildings having <u>any</u> occupied floors located more than 75 <u>55</u> feet (22 860 <u>16 764</u> mm) above the lowest level of fire department vehicle access.

(Reason: To correct and clarify definition of high-rise for Option B jurisdictions.)

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

3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 when used for open air seating; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.

**Section 403.2, exception #2; delete.

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

***Section 404.1.1; change definition of "Atrium" as follows:

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

(Reason: Code is too restrictive. Section 1019 permits unenclosed two story stairways under certain circumstances.)

***Section 406.1.4; add item #4 to read as follows:

4. A 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: Reflects regional practice.)

**Section 406.6.1; add a second paragraph to read as follows:

This occupancy shall include garages involved in servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such

non-major repair. When the repair garage is only involved in such minor repair, it need not comply with Section 406.6.2.

(Reason: Correction to distinguish that service work is a repair garage as well to correspond with definition in the IFC.)

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

In order to be considered as accessible, if not in direct contact with a street or fire lane, a minimum 10-foot wide pathway from the street or approved fire lane must be provided. (See *International Fire Code* Section 503.1.1 for hose lay measurement pathway requirements.)

(Reason: To define what is considered accessible. Consistent with regional amendment to IFC 503.1.1.)

***Table 602; amend footnote b by the addition of the following sentence:

b. Group R-3 and Group U when used as accessory to Group R-3, as applicable in 101.2 shall be required to have a fire-resistance rating where fire separation distance is 3 feet or more.

Group R-2 and Group U carport, as applicable in 406.1.4, exception 4 shall be required to have a fire-resistance rating where fire separation distance is 10 feet or less.

(Reason: Editorial; corresponds with regional amendment to 406.1.4).

**Section 705.11; change the exception to read as follows:

Exception: For other than hazardous exhaust ducts, penetrations by ducts and air transfer openings of . . . {remainder of exception unchanged}.

(Reason: To distinguish that hazardous exhaust ducts are a special case to be treated differently.)

***Section 707.2; change exception number 7 as follows:

{7, 7.1, 7.2 and 7.3 are unchanged}

7.4. Is not open to a corridor in Group I and R occupancies.

7.5. Is not open to a corridor on nonsprinkled floors in any occupancy.

7.6. 7.4 Is separated from floor openings... {remainder of exception unchanged}

(Reason: To be consistent with regionally accepted practices.)

**Section 716.5.2; add exception #4 to read as follows:

4. In the duct penetration of the separation between the private garage and its residence when constructed in accordance with Section 406.1.4, exception #2.

(Reason: To exclude specific penetration from fire damper requirements.)

**Section 902.1; under "Standpipe, Types of" definition amend "Manual dry" by adding a sentence to read as follows:

The system must be supervised as specified in Section 905.9.

(Reason: To conform to consistent standards of safety. Corresponds to IBC 905.2 amendment. Consistent with regional amendment to IFC 902.1.)

***Section 903.2; delete exception.

(Reason: To provide adequate fire protection to enclosed areas. This exception was also deleted from Section 403.2.)

**Add Section 903.2.8.3 to read as follows:

<u>903.2.8.3 Self-service storage facility.</u> An automatic sprinkler system shall be installed throughout all self-service storage facilities.

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

(Reason: Consistent with amendment to IFC 903.2.3.8 and gives building inspector information to enforce

Option A

**Section 903.2.10; amend 903.2.10.3 and add 903.2.10.4, 903.2.10.5, and 903.2.10.6 as follows:

903.2.10.3 Buildings more than 55 feet in height. An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the <u>International Building Code</u>, having an occupant load of 30 or more that is located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access.

Exception:

- 1. Airport control towers.
- 2. Open parking structures in compliance with Section 406.3 of the Building Code.
- 3. Occupancies in Group F-2.

<u>903.2.10.4 High-Piled Combustible Storage.</u> For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 23 to determine if those provisions apply.

<u>903.2.10.5</u> 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 903.2.10; amend 903.2.10.3 and add 903.2.10.4, 903.2.10.5, and 903.2.10.6 as follows:

903.2.10.3 Buildings more than \$\frac{55}{25}\$ **feet in height.** An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the International Building Code, having an occupant load of 30 or more that is located \$\frac{55}{25}\$ feet (\$\frac{16}{764}\$ \frac{10}{25}\$ feet (\$\frac{16}{16}\$ \frac{764}{10}\$ fire department vehicle access.

Exception:

- 1. Airport control towers.
- 2. Open parking structures in compliance with Section 406.3 of the International Building Code.
- 3. Occupancies in Group F-2.

903.2.10.4 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 23 to determine if those provisions apply.

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

<u>903.2.10.6 Buildings Over 6,000 sq.ft.</u> An automatic sprinkler system shall be installed throughout all buildings with a building area over 6,000 sq.ft. For the purpose of this provision, fire walls shall not define separate buildings.

Exceptions:

- 1. Open parking garages in compliance with Section 406.3 of the *International Building Code*.
- 2. Type A-5.

(Reason: Reflect local practices.)

**Section 903.3.1.1.1; change to read as follows:

903.3.1.1.1 Exempt locations. When approved by the code official, automatic Automatic sprinklers shall not be required in the following rooms or areas where such . . . {bulk of section 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 code official.
- 3. 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 fire-resistance rating of not less than 2 hours.
- 4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.

(Reason: Gives more discretion to code official. Protects locations where fire risks are poorly addressed.)

**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 fire protection system shall be designed with a 10 psi safety factor.

(Reason: To define uniform safety factor.)

**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 903.4.)

**Add Section 903.6.2 to read as follows:

<u>903.6.2 Spray booths and rooms.</u> New and existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with IFC Section 1504.

(Reason: Consistent with amendment to IFC 1504.)

**Section 905.2; change to read as follows:

905.2 Installation standards. 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.

(Reason: To define manual dry standpipe supervision requirements. Consistent with regional amendment to IFC 905.2.)

**Section 905.3.2; delete exceptions #1 and 2.

(Reason: Reflects local practice. Consistent with regional amendment to IFC 905.3.2.)

**Section 905.4, item #5; change to read as follows:

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 <u>two-way</u> hose connection located either . . . {remainder of paragraph unchanged} . . .

(Reason: Clarity. Consistent with regional amendment to IFC 905.4.)

**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 regional amendment to IFC 905.9.)

**Add Section 907.1.3 to read as follows:

907.1.3 Design Standards. All alarm systems new or replacement serving 50 or more alarm actuating devices shall be addressable fire detection systems. Alarm systems serving more than 75 smoke detectors or more than 200 total alarm activating devices shall be analog intelligent addressable fire detection systems.

Exception: Existing systems need not comply unless the total building remodel or expansion initiated after the effective date of this code, as adopted, exceeds 30% of the building. When cumulative building remodel or expansion exceeds 50% of the building must comply within 18 months of permit application.

(Reason: Consistent with local practice. Consistent with regional amendment to IFC 907.1.3.)

** Section 907.2.3; change to read as follows:

907.2.3 Group E. A manual fire alarm system 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. 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.</u>

(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. Consistent with regional amendment to IFC 907.2.3.)

** Section 907.2.3; change exception #1 and add exception #1.1 to read as follows:

- 1. Group E <u>educational and day care</u> occupancies with an occupant load of less than 50 <u>when</u> <u>provided with an approved automatic sprinkler system.</u>
 - 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.)

(Reason: Consistent with Texas State laws concerning day care facility requirements. Consistent with regional amendment to IFC 907.2.3.)

Option A

**Section 907.2.12; change to read as follows:

907.2.12 High-rise buildings. Buildings having <u>any</u> floor used for human occupancy located more than 75 feet (22 860 mm) above the lowest level (balance unchanged)

Option B

**Section 907.2.12; change to read as follows:

907.2.12 High-rise buildings. Buildings having <u>any</u> floor used for human occupancy located more than <u>75 55</u> feet (<u>22 860 16 764</u> mm) above the lowest level of fire department vehicle access shall be provided with an automatic fire alarm system and an emergency voice/alarm communications system in accordance with Section 907.2.12.2.

(Reason: To correct definition of high-rise for Option B jurisdictions. Consistent with regional amendment to IFC 907.2.12.)

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

3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1, when used for open air seating; 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 excepted from automatic fire alarm system requirements. Consistent with regional amendment to IFC 907.2.12.)

**Section 907.3; add a second paragraph to read as follows:

Manual alarm actuating devices shall be an approved double action type.

(Reason: Consistent with local requirements. Consistent with regional amendment to IFC 907.4.)

**Add Section 907.5.1 to read as follows:

907.5.1 Installation. All fire alarm systems shall be installed in such a manner that the failure of any single alarm-actuating or alarm-indicating device will not interfere with the normal operation of any other such devices. All systems shall be Class "A" wired with a minimum of six feet separation between supply and return loops. IDC – Class "A" style – D – SLC Class "A" Style 6 – notification Class "B" Style Y.

(Reason: To provide uniformity in system specifications and guidance to design engineers. Consistent with regional amendment to IFC 907.6.1.)

Option A

**Section 907.8.2; change to read as follows:

907.8.2 High-rise buildings. In buildings that have <u>any</u> floor located more than 75 feet (22 860 mm) above the . . . {remainder of section unchanged}.

Option B

**Section 907.8.2; change to read as follows:

907.8.2 High-rise buildings. In buildings that have <u>any</u> floor located more than $\frac{75}{55}$ feet ($\frac{22 \cdot 860}{16}$ 16) above the . . . {remainder of section unchanged}.

(Reason: Correct definition of high-rise for Option B cities.)

***Section 1008.1.3.4; add criteria #7 as follows:

7. If a full building smoke detection system is not provided, approved smoke detectors shall be provided on both the access and egress sides of doors and in a location approved by the authority having jurisdiction of NFPA 72. Actuation of a smoke detector shall automatically unlock the door.

(Reason: To increase safety by preventing smoke from causing a malfunction in the motion sensor release mechanism while at the same time obscuring the manual release button and thereby potentially trapping people in an exit corridor of a burning building. Consistent with regional amendment to IFC 1008.1.3.4)

**Section 1016.1; add an exception #5 to read as follows:

5. In Group B office buildings, corridor walls and ceilings need not be of fire-resistive construction within office spaces of a single tenant when the space is equipped with an approved automatic smoke-detection system within the corridor. The actuation of any detector shall activate alarms audible in all areas served by the corridor. The smoke-detection system shall be connected to the building's fire alarm system where such a system is provided.

(Reason: To reduce redundant requirements in a single tenant situation. Consistent with regional amendment to IFC 1016.1.)

Option A

**Section 1019.1.8; change to read as follows:

1019.1.8 Smokeproof enclosures. In buildings required to comply with Section 403 or 405, each of the exits of a building that serves stories where the any floor surface is located more than 75 feet (22 860 mm) above the lowest level of fire . . . {remainder of section unchanged}

Option B

**Section 1019.1.8; change to read as follows:

1019.1.8 Smokeproof enclosures. In buildings required to comply with Section 403 or 405, each of the exits of a building that serves stories where the any floor surface is located more than 75 55 feet (22 860 16 764 mm) above the lowest level of fire . . . {remainder of section unchanged}.

(Reason: Correct dimension for Option B jurisdictions.)

**Section 1101.2; add an exception to read as follows:

Exception: Buildings regulated under State Law and built in accordance with State certified plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of this Chapter.

(Reason: To accommodate buildings regulated under Texas State law.)

**Section 1109.2.1; change to read as follows:

1109.2.1 Unisex toilet and bathing rooms. In assembly and mercantile occupancies, an accessible unisex toilet room shall be provided where an aggregate of six or more male and or female water closets is required provided. In buildings of mixed occupancy, only those water closets . . . {remainder of section unchanged}.

(Reason: Amendment is necessary to coincide with amendments in IBC Chapter 29.)

**Section 1210.2, exception #2; change to read as follows:

2. Toilet rooms that are not accessible to the public and which have not more than one water closet; provided that walls around urinals comply with the minimum surrounding material specified by Section 419.3 of the *International Plumbing Code*.

(Reason: Recognize the minimum wall material requirements of the IPC. Consistent with regional amendment to IPC 419.3.)

**Section 1403.3; change to read as follows:

1403.3 Vapor retarder. An approved vapor retarder shall be provided. In all framed walls, floors and roof/ceilings comprising elements of the building thermal envelope, a vapor retarder, when installed, shall be installed in a manner so as to not trap moisture. Vapor retarders shall be tested in accordance with ASTM E 96.

(delete all exceptions)

(Reason: Vapor barriers installed in this region perform best if the vapor barrier is installed in a position opposite that of position required in northern climates in the nation. However, no vapor barrier at all is preferable in this region.)

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

- b. All individual replacement shingles or shakes shall be in compliance with the rating required by this table.
- c. Non-classified roof coverings shall be permitted on buildings of U occupancies having not more than 120 sq.ft. of projected roof area. When exceeding 120 sq.ft of projected roof area, buildings of U occupancies may use non-rated non-combustible roof coverings.

(Reason: Conforms to local practice affording increased fire protection.)

**Section 1505.7; delete.

(Reason: Conforms to local practice.)

**Add Section 2308.2.3 to read as follows:

2308.2.3 Application to engineered design. When accepted by the Building Official, any portion of this section is permitted to apply to buildings that are otherwise outside the limitations of this section provided that:

- 1. The resulting design will comply with the requirements specified in Chapter 16;
- 2. The load limitations of various elements of this section are not exceeded; and
- 3. The portions of this section which will apply are identified by an engineer in the construction documents.

(Reason: Allows engineer to reference Section 2308 for designs for wood structures like four story apartment buildings; eliminates excessive engineering.)

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

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.)

2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number <u>as follows:</u>

1. <u>Assembly Occupancies: At least one drinking fountain shall be provided at each floor level in</u> an approved location.

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

- 2. Groups A, B, F, H, I, M and S Occupancies: Buildings or portions thereof where persons are employed shall be provided with at least one water closet for each sex except as provided for in Section 2902.2.
- 3. Group E Occupancies: Shall be provided with fixtures as shown in Table 2902.1.
- 4. Group R Occupancies: Shall be provided with fixtures as shown in Table 2902.1.

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

2902.2 Finish material. Finish materials shall comply with Section 1210.

(Reason: Consistent with regional amendments made to IPC Sections 403.1 and 403.1.2.)

END

^{**} Section 2902.1, 2902.1.1 and 2902.1.2; change to read as follows and add sub sections: