

Office of Neighborhood Services

City of Richland Hills, Texas

Memorandum

To: Honorable Mayor Bill Agan and members of the Richland Hills City Council
From: Scott Mitchell, Director of Neighborhood Services
Date: January 21, 2014
Subject: Approval of Updated Codes

Council Action Requested:

Consider approval of the 2012 Editions of the following codes:

International Building Code

International Fuel Gas Code

International Energy Conservation Code

International Mechanical Code

International Residential Code

International Plumbing Code

International Existing Building Code

International Property Maintenance Code

Consider approval of the 2011 Edition of the following code:

National Electric Code

Background Information:

Building, construction and property maintenance codes are regularly updated by the International Code Council to meet new safety and industry standards. The North Central Texas Council of Government's has a sitting committee made up of representatives from member cities. This committee reviews and recommends codes and code amendments

for NCTCOG member cities. The intent of this collaborative effort is to have uniform codes and policies across the North Texas region to reduce confusion over requirements that builders and trades personnel have to follow.

Board/Citizen Input: N/A

Financial Impact: N/A

Legal Review: Has been reviewed by Betsy Elam, City Attorney

Staff Contacts:

Scott Mitchell
Director of Neighborhood Services
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Attachments: Ordinance approving adoption of 2012 editions

Exhibits: NCTCOG Regional Amendments

We recommend removing this notice requirement from each of the International Codes as follows:

- 2012 International Building Code: delete sections 114.2 Notice of violation and 114.3 Prosecution of violation
- 2012 International Fuel Gas Code: delete sections 108.2 Notice of violation and 108.3 Prosecution of violation
- 2012 International Energy Conservation Code: no deletions necessary; does not contain notice or prosecution provisions.
- 2012 International Mechanical Code : delete sections 102.8 Notice of violation and 108.3 Prosecution of violation
- 2012 International Residential Code: delete sections R113.2 Notice of violation and R113.3 Prosecution of violation
- 2012 International Plumbing Code: delete sections 108.2 Notice of violation and 108.3 Prosecution of violation
- 2012 International Existing Building Code: delete sections 113.2 Notice of violation and 113.3 Prosecution of violation
- 2012 International Property Maintenance Code: delete sections 106.2 Notice of violation and 106.3 Prosecution of violation

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF RICHLAND HILLS, TEXAS AMENDING VARIOUS PROVISIONS OF CHAPTER 14, "BUILDINGS AND BUILDING REGULATIONS", TO ADOPT THE 2012 EDITIONS OF THE INTERNATIONAL BUILDING CODE, INTERNATIONAL FUEL GAS CODE, INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL RESIDENTIAL CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL EXISTING BUILDING CODE, INTERNATIONAL PROPERTY MAINTENANCE CODE, AND THE 2011 EDITION OF THE NATIONAL ELECTRIC CODE; PROVIDING FOR THE MODIFICATION OF THE CODES TO INCORPORATE LOCAL AMENDMENTS; PROVIDING FOR RECORDING OF THE CODES AS PUBLIC RECORDS; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY FOR VIOLATIONS; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Richland Hills, Texas is a home rule city acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, the City Council has previously adopted the 2003 Editions of the International Fuel Gas Code, International Energy Conservation Code, International Mechanical Code, International Residential Code, and International Plumbing Code, the 2006 Editions of the International Building Code, and the 2008 Edition of the National Electric Code; and

WHEREAS, the City Council desires to update to and adopt the 2012 Editions of the International Building Code, International Fuel Gas Code, International Energy Conservation Code, International Mechanical Code, International Residential Code, International Plumbing Code, International Existing Building Code, International Property Maintenance Code, and the 2011 Edition of the National Electric Code; and

WHEREAS, the City Council of the City of Richland Hills, Texas, desires to provide a mechanism by which local modifications reflecting the unique needs of the City of Richland Hills may be made when deemed appropriate; and

WHEREAS, the North Central Texas Council of Governments and City Staff have recommended adoption of certain amendments to the Codes to reflect locally accepted practice; and

WHEREAS, the City Council of the City of Richland Hills, Texas, has determined that the adoption of these Codes as amended herein is in the public interest and therefore deems it

advisable to enact this ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF RICHLAND HILLS, TEXAS:

SECTION 1.

The Code of Ordinances, City of Richland Hills, is hereby revised by amending sections 14-31 and 14-32 of Article II “Building Code” of Chapter 14 to read as follows:

“Sec. 14-31. Adopted.

The 2012 Edition of the International Building Code is hereby adopted as the official electrical code of the City of Richland Hills, Texas. This building code is fully incorporated by reference as though copied into this ordinance in its entirety. The material contained in the International Building Code, and any local amendments thereto, shall not be included in any formal municipal codification of ordinances but shall be maintained as a public record in the office of the City Secretary and will be available for public inspection and copying during regular business hours.

Sec. 14-32. Amendments.

The 2012 Edition of the International Building Code, as adopted herein, is hereby amended as shown on Exhibit AA@ attached hereto.”

SECTION 2.

The Code of Ordinances, City of Richland Hills, is hereby revised by amending sections 14-441 and 14-442 of Article XII “Fuel Gas Code” of Chapter 14 to read as follows:

“Sec. 14-441. Adopted.

The 2012 Edition of the Fuel Gas Code is hereby adopted as the official fuel gas code of the City of Richland Hills, Texas. This fuel gas code is fully incorporated by reference as though copied into this ordinance in its entirety. The material contained in the International Fuel Gas Code, and any local amendments thereto, shall not be included in any formal municipal codification of ordinances but shall be maintained as a public record in the office of the City Secretary and will be available for public inspection and copying during regular business hours.

Sec. 14-442. Amendments.

The 2012 Edition of the International Fuel Gas Code, as adopted herein, is hereby amended as shown on Exhibit AB@ attached hereto.”

SECTION 3.

The Code of Ordinances, City of Richland Hills, is hereby revised by amending sections 14-420 and 14-421 of Article XI “Energy Conservation Code” of Chapter 14 to read as follows:

“Sec. 14-420. Adopted.

The 2012 Edition of the International Energy Conservation Code is hereby adopted as the official energy conservation code of the City of Richland Hills, Texas. This energy conservation code is fully incorporated by reference as though copied into this ordinance in its entirety. The material contained in the International Energy Conservation Code, and any local amendments thereto, shall not be included in any formal municipal codification of ordinances but shall be maintained as a public record in the office of the City Secretary and will be available for public inspection and copying during regular business hours.

Sec. 14-421. Amendments.

The 2009 Edition of the International Energy Conservation Code, as adopted herein, is hereby amended as shown on Exhibit AC@ attached hereto.”

SECTION 4.

The Code of Ordinances, City of Richland Hills, is hereby revised by amending sections 14-276 and 14-277 of Article VII “Mechanical Code” of Chapter 14 to read as follows:

“Sec. 14-276. Adopted.

The 2012 Edition of the International Mechanical Code is hereby adopted as the official mechanical code of the City of Richland Hills, Texas. This mechanical code is fully incorporated by reference as though copied into this ordinance in its entirety. The material contained in the International Mechanical Code, and any local amendments thereto, shall not be included in any formal municipal codification of ordinances but shall be maintained as a public record in the office of the City Secretary and will be available for public inspection and copying during regular business hours.

Sec. 14-277. Amendments.

The 2012 Edition of the International Mechanical Code, as adopted herein, is hereby amended as shown on Exhibit AD@ attached hereto.”

SECTION 5.

The Code of Ordinances, City of Richland Hills, is hereby revised by amending sections 14-400 and 14-401 of Article X “Residential Code” of Chapter 14 to read as follows:

“Sec. 14-400. Adopted.

The 2012 Edition of the International Residential Code is hereby adopted as the official residential code of the City of Richland Hills, Texas. This residential code is fully incorporated by reference as though copied into this ordinance in its entirety. The material contained in the International Residential Code, and any local amendments thereto, shall not be included in any formal municipal codification of ordinances but shall be maintained as a public record in the office of the City Secretary and will be available for public inspection and copying during regular business hours.

Sec.14-401. Amendments.

The 2012 Edition of the International Residential Code, as adopted herein, is hereby amended as shown on Exhibit AE@ attached hereto.”

SECTION 6.

The Code of Ordinances, City of Richland Hills, is hereby revised by amending sections 14-146 and 14-147 of Article IV “Plumbing Code” of Chapter 14 to read as follows:

“Sec. 14-146. Adopted.

The 2012 Edition of the International Plumbing Code is hereby adopted as the official plumbing code of the City of Richland Hills, Texas. This plumbing code is fully incorporated by reference as though copied into this ordinance in its entirety. The material contained in the International Plumbing Code, and any local amendments thereto, shall not be included in any formal municipal codification of ordinances but shall be maintained as a public record in the office of the City Secretary and will be available for public inspection and copying during regular business hours.

Sec. 14-147. Amendments.

The 2012 Edition of the International Plumbing Code, as adopted herein, is hereby amended as shown on Exhibit AF@ attached hereto.”

SECTION 7.

The Code of Ordinances, City of Richland Hills, is hereby revised by adding sections 14-531 and 14-532 to a new Article XVI “Existing Building Code” of Chapter 14 to read as follows:

Sec. 14-531. Adopted.

The 2012 Edition of the International Existing Building Code is hereby adopted as the official existing building code of the City of Richland Hills, Texas. This existing building code is fully incorporated by reference as though copied into this ordinance in its entirety. The material contained in the International Existing Building Code shall not be included in any formal municipal codification of ordinances but shall be maintained as a public record in the office of the

City Secretary and will be available for public inspection and copying during regular business hours.

Sec. 14-532. Amendments.

The 2012 Edition of the International Existing Building Code, as adopted herein, is hereby amended as shown on Exhibit AG@ attached hereto.”

SECTION 8.

The Code of Ordinances, City of Richland Hills, is hereby revised by amending sections 14-461 and 14-462 of Article XIII “Property Maintenance Code” of Chapter 14 to read as follows:

“Sec.14-461. Adopted.

The 2012 Edition of the International Property Maintenance Code is hereby adopted as the official property maintenance code of the City of Richland Hills, Texas. This property maintenance code is fully incorporated by reference as though copied into this ordinance in its entirety. The material contained in the International Property Maintenance Code, and any local amendments thereto, shall not be included in any formal municipal codification of ordinances but shall be maintained as a public record in the office of the City Secretary and will be available for public inspection and copying during regular business hours.

Sec. 14-462. Amendments.

The 2012 Edition of the International Property Maintenance Code, as adopted herein, is hereby amended as shown on Exhibit AH@ attached hereto.”

SECTION 9.

The City of Richland Hills may from time to time determine that additional local modifications to the code adopted herein are necessary and appropriate to meet the unique needs of the City of Richland Hills. To effectuate modifications, the city council may enact individual ordinances amending this ordinance fully setting forth the changes to be made. Such subsequent amendments shall be consolidated as an exhibit to this ordinance, and shall be maintained as a public record in the office of the city secretary, available for public inspection and copying during regular business hours.

SECTION 10.

This Ordinance shall be cumulative of all provisions of ordinances of the City of Richland Hills, except where the provisions of this ordinance are in direct conflict with the provisions of such ordinances, in which event the conflicting provisions of such ordinances are hereby repealed.

SECTION 11.

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs and sections of this Ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this Ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining, phrase, clauses, sentences, paragraphs or sections of this Ordinance since the same would have been enacted by the City Council without incorporation in this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 12.

Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this Ordinance shall be fined no more than Two Thousand Dollars (\$2,000.00) for all violations involving zoning, fire safety or public health and sanitation, including dumping or refuse, and shall be fined not more than Five Hundred Dollars (\$500.00) for all other violations of this Ordinance. Each day that a violation is permitted to exist shall constitute a separate offense.

SECTION 13.

All rights and remedies of the City of Richland Hills, Texas, are expressly saved as to any and all violations of the provisions of any ordinances of the City of Richland Hills which have accrued at the time of the effective date of this Ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances same shall not be affected by this Ordinance but may be prosecuted until final disposition by the courts.

SECTION 14.

The City Secretary of the City of Richland Hills is hereby authorized to publish this ordinance in book or pamphlet form for general distribution among the public, and the operative provisions of this ordinance as so published shall be admissible in evidence in all courts without further proof than the production thereof.

SECTION 15.

The City Secretary of the City of Richland Hills is directed to publish the caption and penalty clause of this Ordinance in the official newspaper of the City of Richland Hills, Texas, as required by Section 52.011 of the Texas Local Government Code.

SECTION 16.

This Ordinance shall be in full force and effect from and after its passage and publication as provided by law, and it is so ordained.

PASSED AND APPROVED _____ **DAY OF** _____, **2013.**

THE HONORABLE BILL AGAN, MAYOR

ATTEST:

LINDA CANTU, CITY SECRETARY

EFFECTIVE DATE: _____

APPROVED AS TO FORM AND LEGALITY:

BETSY ELAM, CITY ATTORNEY

**Recommended Amendments to the
2012 International Building Code**
North Central Texas Council of Governments Region

The following sections, paragraphs, and sentences of the *2012 International Building Code* are hereby amended as follows: Standard type is text from the IBC. Underlined type is text inserted. ~~Lined through type is deleted text from IBC.~~ A double asterisk (**) at the beginning of a section identifies an amendment carried over from the 2009 edition of the code and a triple asterisk (***) identifies a new or revised amendment with the 2012 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.

Note: Historically NCTCOG has limited chapter 1 amendments in order to allow each city to insert their local policies and procedures. We now have suggested certain items to be brought to the attention of cities considering adoption of the code that may be of concern to several jurisdictions. **It is still intended to be discretionary to each city to determine which chapter 1 amendments to include.**

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

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.6 and referenced elsewhere in this code, when specifically adopted, shall be considered part of the requirements of this code to the prescribed extent of each such reference. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the Electrical Code shall mean the Electrical Code as adopted.

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

****Section 101.4.7; add the following:**

101.4.7 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**

SECTION 103
**~~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.)

*****Section 104.10.1; 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 105.2; under sub-title entitled "Building" delete items 1, 2, 10 and 11 and re-number as follows:**

Building:

- ~~1. 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 m²).~~
- ~~2. Fences not over 7 feet (1829 mm) high.~~
- ~~3. 1. (Unchanged)~~
- ~~4. 2. (Unchanged)~~
- ~~5. 3. (Unchanged)~~
- ~~6. 4. (Unchanged)~~
- ~~7. 5. (Unchanged)~~
- ~~8. 6. (Unchanged)~~
- ~~9. 7. (Unchanged)~~
- ~~10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.~~
- ~~11. 8. (Unchanged)~~
- ~~12. 9. (Unchanged)~~
- ~~13. 10. (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.)

****Section 110.3.5; jurisdiction has the option to delete depending on local inspection policies.**

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

****Section 202; amend definition of Ambulatory Care Facility as follows:**

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation by the services provided. This group may include but not be limited to the following:

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

*(Reason: To clarify the range of uses included in the definition. [Explanatory note related to **Ambulatory Care Facilities**: This group of uses as defined in Chapter 2 includes a medical or dental office where persons are put under for dental surgery or other services. Section 903.2.2 will now require such uses to be sprinklered 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. Section 1009 permits unenclosed two story stairways under certain circumstances.)

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

Option A

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

Option B

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. This correction needed for Option B and C cities only as a basic definition of High Rise is now provided.)

*****Section 303.1.3; add a sentence to read as follows:**

303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy, except when applying the assembly requirements of Chapter 10 and 11.

(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; 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 12, 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. Open air portions of buildings Buildings with a Group A-5 occupancy in accordance with Section 303.6.

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

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

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

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

(Reason: Consistent with amended atrium definition.)

****Section 406.3.2; add item 3 to read as follows:**

3. 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: 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 406.8; add a second paragraph to read as follows:**

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: To further clarify types of service work allowed in a repair garage, as well as to correspond with definition in the IFC.)

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

506.2.2 Open Space Limits. Such open space shall be either on the same lot or dedicated for public use and shall be accessed from a street or approved fire lane. In order to be considered as accessible, if not in direct contact with a street or 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.)

****Section 712.1.8, change item 5 to read as follows:**

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

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

****Section 713.14.1 Elevator Lobby. Exceptions: 4.3 change to read as follows:**

Option A

*****Section 713.14.1; Exception 4.3** {No amendment necessary}

Option B

*****Section 713.14.1; Exception 4.3** Elevators serving floor levels over ~~75~~ 55 feet (~~22 860 mm~~) (16 764 mm) above the lowest level of fire department vehicle access in high rise buildings.

(Reason: This correction needed for Option B and C cities only as a basic definition of High Rise is now provided.)

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

[F] 903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted ~~in lieu of~~ in lieu of 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 in general. 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. This also meets with local practices in the region.)

****Section 903.2; add the following:**

[F] 903.2 Where required. *Approved automatic sprinkler systems* in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. 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 3006.5 for the purpose of elevator passenger and firefighter safety. This amendment is contingent on the Building Code amendment eliminating the Exceptions to Section 3006.4, such that passive fire barriers for these areas are maintained. This also meets with local practices in the region.)

****Section 903.2; delete the exception.**

(Reason: The exception deletion is due to the fact that such telecom areas pose an undue fire risk to the structural integrity of the building. This also meets with local practices in the region.)

Options A and B

Section 903.2.1.2; No Change.

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

[F] 903.2.9.3 Self-service storage facility. 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: Fire departments are unable to inspect these commercial occupancies and are unaware of the contents being stored. This also meets with local practices in the region.)

Option A

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

[F] 903.2.11.3 Buildings 55 feet or more in height. An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the International Building Code, 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.

Exceptions:

1. ~~Airport control towers.~~
2. ~~Open parking structures in compliance with Section 406.5 of the Building Code.~~
3. ~~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 IFC 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 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the *International Building Code*, having an occupant load of 30 or more that is located 55 35 feet (16 764 10 668mm) or more above the lowest level of fire department vehicle access.

Exceptions:

1. ~~Airport control towers.~~
2. ~~Open parking structures in compliance with Section 406.5 of the *International Building Code*.~~
3. ~~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 IFC 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 over 6,000 sq.ft. 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*.

(Reason: Reflects regional practices.)

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

[F] 903.3.1.1.1 Exempt locations. When approved by the fire code official, automatic sprinklers shall not be required in the following rooms or areas where such ...*{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 code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. ~~In rooms or areas that are of noncombustible construction with wholly noncombustible contents.~~
5. ~~Fire service access~~ Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
6. {Delete.}

(Reason: Gives more direction to code official. 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 903.3.1.2.2; add the following:**

[F]Section 903.3.1.2.2 Attics, Open Breezeways, and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, open breezeways, and attached garages.

(Reason: Open breezeways already require sprinkler protection in Section 1026.6, Exception 4. Attic protection is required in accordance with existing regional practice and issues with fire exposure via soffit vents, as well as firefighter safety. Attached garages already require sprinkler via NFPA 13R – re-emphasis.)

****Section 903.3.1.3; add the following:**

[F] 903.3.1.3 NFPA 13D sprinkler systems. *Automatic sprinkler systems* installed in one- and two-family dwellings, Group R-3 and R-4 congregate living facilities and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.

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

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

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

(Reason: To define uniform safety factor.)

****Section 903.4 Sprinkler system supervision and alarms; add a second paragraph after the exceptions to read as follows:**

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

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

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

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

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

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

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

(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.)

*****Add Section 905.3.9 and exception to read as follows:**

[F] 905.3.9 Building area. In buildings exceeding 10,000 square feet in area per story, Class I automatic wet or manual wet standpipes shall be provided 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.

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

(Reason: Allows for the rapid deployment of hoselines to the body of the fire.)

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

[F] 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 a stairway with stair access to the roof provided in accordance with Section 1009.16. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.

(Reason: Maintains previously adopted amendment for the following purpose. Reduced the amount of pressure required to facilitate testing, and provides backup protection for fire fighter safety.)

****Section 905.4 Location of Class I standpipe hose connections; add the following item 7:**

[F] 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.

(Reason: Allows for the rapid deployment of hoselines to the body of the fire.)

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

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

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

****Add Section 907.1.4 to read as follows:**

[F] 907.1.4 Design standards. All alarm systems new or replacement shall be addressable. Alarm systems serving more than 20 smoke detectors shall be analog addressable.

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 and emerging technology. Reduces need for panel replacement in the future.)

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

[F] 907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with new Section 907.6 shall be installed in Group A occupancies having an occupant load of

300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.9 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: {unchanged.}

Activation of fire alarm notification appliances shall:

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

(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. Also reflects regional practice.)

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

[F] 907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

(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.)

****Section 907.2.3; add exception 1.1 to read as follows:**

[F] Exceptions:

1. A manual fire alarm system is not required in Group E educational and day care occupancies with an occupant load of 30 or less when provided with an approved automatic sprinkler system.
 - 1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)

(Reason: Consistent with Texas State laws concerning day care facility requirements.)

***** Section 907.4.2 Manual fire alarm boxes to read as follows:**

[F] {Text unchanged}.....Sections 907.4.2.1 through 907.4.2. 6. 7

(Reason: Added number 907.4.2.7.)

*****Add Section 907.4.2.7 to read as follows:**

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

(Reason: Helps to reduce false alarms. Consistent with regional requirements.)

****Add Section 907.6.1.1 to read as follows:**

[F] 907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the

normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from an addressable input (monitor) module may be wired Class B, provided the distance from the addressable module 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.)

****Add Section 907.6.5.3 to read as follows:**

[F] 907.6.5.3 Communication requirements. All alarm systems, new or replacement, shall transmit alarm, supervisory and trouble signals descriptively to the approved central station, remote supervisory station or proprietary supervising station as defined in NFPA 72, with the correct device designation and location of addressable device identification. Alarms shall not be permitted to be transmitted as a General Alarm or Zone condition.

(Reason: To assist responding personnel in locating the emergency event.)

****Section 910.1; change Exception 2 to read as follows:**

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

(Reason: Allows the fire department to control the smoke and heat during and after a fire event.)

***** Section 910.2 Where required to read as follows:**

[F] {Text unchanged}..... Sections 910.2.1 ~~and through~~ 910.2.2 **4**

(Reason: Added numbers 910.2.3 and 910.2.4)

****Add subsections 910.2.3 with exceptions to read as follows:**

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

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

Exception: Buildings of noncombustible construction containing only noncombustible materials.

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

Exception: Buildings of noncombustible construction containing only noncombustible materials.

(Reason: Provides an acceptable alternative for large storage and manufacturing occupancies, rather than requiring interior rated exit passageways, as has been allowed for many years.)

****Add subsections 910.2.4 to read as follows:**

[F] 910.2.4 Exit access travel distance increase. Buildings and portions thereof used as a Group F-1 or S-1 occupancy where the maximum exit access travel distance is increased in accordance with Section 1016.2.2.

(Reason: Provides an acceptable alternative for large storage and manufacturing occupancies, rather than requiring interior rated exit passageways, as has been allowed for many years.)

****Table 910.3; Change the title of the first row of the table from “Group F-1 and S-1” to include “Group H” and to read as follows:**

Group H, F-1 and S-1

(Reason: Consistency with the amendment 910.2.3 to include Group H.)

****Add Section 912.2.3 to read as follows:**

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

(Reason: Consistent with regional practices.)

****Section 913.1; add second paragraph and exception to read as follows:**

[F] When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by 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 1004.1.2; delete exception:**

1004.1.2 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.2. For areas without fixed seating, the occupant load shall not be less than that number determined by dividing the floor area under consideration by the occupant load factor assigned to the function of the space as set forth in Table 1004.1.2. Where an intended function is not listed in Table 1004.1.2, the building official shall establish a function based on a listed function that most nearly resembles the intended function.

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

(Reason: Authority having jurisdiction (AHJ) already has this authority. Technical substantiation is required to support deviation from table values.)

****Section 1007.1; add the following Exception 4:**

Exceptions:

{previous exceptions unchanged}

4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1007.

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

***** Section 1007.5; Platform lifts, amend to read as follows:**

1007.5 Platform lifts. Platform (wheelchair) lifts . . . required *accessible route* in Section 1109.7 8, Items 1 through ~~9~~ 10. Standby power . . . *{remainder unchanged}*

(Reason: Editorial.)

*****Section 1008.1.9.4; 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, 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 1008.1.9.9; change to read as follows:**

1008.1.9.9 Electromagnetically locked egress doors. Doors in the *means of egress* in buildings with an occupancy in Group A, B, E, I-1, I-2, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, I-1, I-2, M, R-1 or R-2 shall be permitted to be electromagnetically locked if equipped with *listed* hardware that incorporates a built-in switch and meet the requirements below: *{remaining text unchanged}*

(Reason: Regional practice to permit such locks due to the presence of trained staff.)

****Section 1015; add new section 1015.7 to read as follows:**

1015.7 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.

(Reason: Cross reference necessary for coordination.)

*****Section 1016; add new section 1016.2.2 to read as follows:**

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

1. The portion of the building classified as Group F-1 or S-1 is limited to one story in height;
2. The minimum height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet (7315 mm); and
3. The building is equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1.

(Reason: Past regional practice allowed smoke and heat vents to be utilized to increase travel distance, which resulted in problems when utilizing ESFR systems. This amendment adopts wording from the upcoming 2015 IBC, which has been approved by final action via the ICC code development process but is not yet published.)

*****Section 1018.1; add exception 6 to read as follows:**

{previous text unchanged}

6. In Group B office buildings, corridor walls and ceilings within single tenant spaces need not be of fire-resistive construction when the tenant space corridor is provided with system smoke detectors tied to an approved automatic fire alarm. The actuation of any detector shall activate alarms audible in all areas served by the corridor.

(Reason: To reduce redundant requirements in a single tenant situation. Intended to be consistent with regional amendment to IFC.)

****Section 1018.6; amend to read as follows:**

1018.6, Corridor Continuity. ~~Fire-Resistance-Rated~~ All corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms. *{Remainder unchanged}*

{Exception unchanged}

(Reason: Once in corridor, corridor should not be interrupted or discontinuous.)

****Section 1026.6; amend exception 4 to read as follows:**

Exceptions: *{Exceptions 1 through 3 unchanged}*

4. Separation from the interior open-ended corridors of the building... *{remaining text unchanged}*

(Reason: To clarify that Section 1022.7, i.e., the 180 degree rule is applicable; and is further reinforced by new Exception 4.4.)

*****Section 1028.1.1.1; delete.**

(Reason: Unenforceable.)

*****Section 1029.1; amend to read as follows:**

1029.1 General. In addition to the *means of egress* required by this chapter, provisions shall be made for *emergency escape and rescue openings* in Group R and I-1 ~~Group R-2~~ occupancies in accordance with ~~Tables 1021.2(1) and 1021.2(2) and Group R-3~~ occupancies. *{Remainder unchanged}*

Exceptions:

{Exceptions 1 through 3 unchanged.}

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

(Reason: Maintains legacy language to ensure egress from residential type occupancies and maintain exception for residential occupancies where an NFPA 13 or 13R sprinkler system is installed, but not for a 13D system.)

****Section 1101.2; Add exception to read as follows:**

Exceptions: Projects registered with the Architectural Barriers Division of the Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this Chapter.

(Reason: To accommodate buildings regulated under state law.)

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

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

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

(Reason: See IECC change to performance testing. Whole-house ventilation is recognized as necessary).

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

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

e. [delete]

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

****Section 1505.7; delete the section**

(Reason: Conforms to regional practice.)

****Section 1510.1; add a sentence to read as follows:**

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

{text of exception unchanged}

(Reason: Relocated the text to more appropriate place. Previously was footnote "b" to Table 1505.1)

****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; change footnote f to read as follows:**

f. Drinking fountains are not required in M Occupancies with an occupant load of 100 or less, B Occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

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

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

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

2902.1.3.1 Hand washing lavatory. At least one hand washing lavatory shall be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

2902.1.3.2 Service sink. In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tool and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the <Jurisdiction's> health department.

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

****Section 3006.1; change to read as follows:**

3006.1. General. Access Elevator machine rooms shall be provided. *{Remainder unchanged.}*

(Reason: An elevator machine room is necessary to provide a protected space for elevator equipment that is used by the fire service, the disabled, and in the future, building occupant evacuations.)

****Section 3006.4 {3006.5 if previous amendment adopted}; add a sentence to read as follows and delete exceptions 1 and 2:**

[E] 3006.4. Machine Rooms and Machinery Spaces: *{text unchanged}*... Storage shall not be allowed within the elevator machine room. Provide approved signage at each entry door to the elevator machine room stating "Elevator Machinery – No Storage Allowed."

(Reason: Firefighter and public safety. This amendment eliminates the shunt trip requirement of the International Building Code Section 3006.5 for the purpose of elevator passenger and firefighter safety. This amendment is contingent on the Building Code amendment eliminating the Exceptions to Section 3006.4, such that passive fire barriers for these areas are maintained. This also meets with local practices in the region.)

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

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

(Reason: To recognize "state requirements".)

*****Section 3401.6 5 Alternative Compliance.** Work performed in accordance with the *International Existing Building Code* shall be deemed to comply with the provisions of this chapter with prior approval from the Building Official.

(Reason: Correct typo and align with referenced standards.)

*****Section 3401.5 6 Dangerous Conditions.** *{Remainder unchanged.}*

(Reason: Correct typo and align with referenced standards.)

**Recommended Amendments to the
2012 International Energy Conservation Code**
North Central Texas Council of Governments Region
(Climate Zone 3 of the IECC)

The following sections, paragraphs, and sentences of the *2012 International Energy Conservation Code* (IECC) are hereby amended as follows: Standard type is text from the IECC. Underlined type is text inserted. ~~Lined through type is deleted text from IECC.~~ A double (**) asterisk at the beginning of a section identifies an amendment carried over from the 2009 edition of the code and a triple (***) asterisk identifies a new or revised amendment with the 2009 code.

Note: Historically NCTCOG has limited Chapter 1 amendments in order to allow each city to insert their local policies and procedures. We now have suggested certain items to be brought to the attention of cities considering adoption of the code that may be of concern to several jurisdictions. **It is still intended to be discretionary to each city to determine which Chapter 1 amendments to include.**

The 2012 IECC contains separate provisions for commercial buildings (preceded by “C” for Commercial) and for residential buildings (preceded by “R” for residential buildings) 3 stories or less. Each set of provisions are separately applied to buildings within their respective scope. Each set of provisions also contains a Scope and Administration chapter, a Definitions chapter, a General Requirements chapter and a chapter containing energy efficiency requirements applicable to building within their respective scope.

Recommended amendments that match sections in each of the respective provisions (“C” and “R”) are written to represent both sections rather than duplicating the recommended amendment in this document.

Sections N1101.2 through N1105 of the *2012 International Residential Code* (IRC) are noted to be extracted from the 2012 IECC. The Building and Residential Advisory Board (BRAB) recommends amending Chapter 11 [RE] ENERGY EFFICIENCY of the 2012 IRC to refer to the residential provisions of the 2012 IECC.

As of the date of the recommendations the State Energy Conservation Office (SECO) has not adopted the 2012 IECC. Consequently the recommended amendments to the 2012 IECC have been analyzed for stringency with the current Texas Building Energy Performance Standards (TBEPS) which is the 2009 Edition of the IECC and the energy provisions of the IRC. Some amendments below are noted that if/when SECO does by rule adopt the 2012 IECC as the TBEPS, the proposed amendment would be deemed less stringent and therefore would not be considered a recommended amendment.

****Section C101.4.2 and R101.4.2; change to read as follows:**

C101.4.2/R101.4.2 Historic Buildings. Any building or structure that is listed in the State or National Register of Historic Places; designated as a historic property under local or state designation law or survey; certified as a contributing resource with a National Register listed or locally designated historic district; or with an opinion or certification that the property is eligible to be listed on the National or State Registers of

Historic Places either individually or as a contributing building to a historic district by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, ~~are exempt from~~ shall comply with all of the provisions of this code.

Exception: Whenever a provision or provisions shall invalidate or jeopardize the historical designation or listing, that provision or provisions may be exempted.

(Reason: This is less restrictive than the legislative mandates. It is reasonable to expect compliance with duct sealing, replacement lighting and the installation of insulation, for example, when possible.)

****Section C102/R102; add Section C102.1.2 and R102.1.2 to read as follows:**

C102.1.2/R102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

(Reason: this amendment is added to allow alternative compliance in accordance with Texas HB 1365, 78th Legislature.)

****Section C202 and R202; add the following definition:**

GLAZING AREA. Total area of the glazed fenestration measured using the rough opening and including sash, curbing or other framing elements that enclose conditioned space. Glazing area includes the area of glazed fenestration assemblies in walls bounding conditioned basements. For doors where the daylight opening area is less than 50 percent of the door area, the glazing area is the daylight opening area. For all other doors, the glazing area is the rough opening area for the door including the door and the frame.

(Reason: Since the window to floor area ratios have been added to the prescriptive tables, it is necessary to define glazing area.)

*****Section R402.2.2; amend the section to read as follows:**

R402.2.2 Ceilings without attic spaces. Where Section R402.1.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section R402.1.1 shall be limited to 500 square feet (46 m²) ~~or 20 percent of the total insulated ceiling area, whichever is less.~~ This reduction shall not apply to the U -factor alternative approach in Section R402.1.3 and the total UA alternative in Section R402.1.4.

(Reason: Retains the current 2009 language to eliminate confusion and limit the area to 500 square feet maximum)

***** Table R402.1.1 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT; Amend by changing the WOOD FRAME WALL R-VALUE for CLIMATE ZONE 3 to read as follows:**

13

(Reason: Retain the values in the 2009 code.)

If/when SECO does by rule adopt the 2012 IECC, this proposed amendment would be deemed less stringent and therefore would not be considered a recommended amendment.

***** Table R402.1.3 EQUIVALENT U-FACTORS; Amend by changing the WOOD FRAME WALL U-FACTOR for CLIMATE ZONE 3 to read as follows:**

0.082

(Reason: Retain the values in the 2009 code.)

If/when SECO does by rule adopt the 2012 IECC, this proposed amendment would be deemed less stringent and therefore would not be considered a recommended amendment.

*****R402.4.1.2 Testing; Add a last paragraph to read as follows:**

Testing may only be performed by individuals that are certified HERS Raters or Rating Field Inspectors by RESNET or Performance Verification Technicians certified by Texas HERO, or other certifications as may be approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure.

(Reason: The 2012 International Residential Code (IRC) and International Energy Conservation Code (IECC) include enhanced emphasis on envelope infiltration and duct leakage. Significant changes in the residential energy requirements include more frequent requirement of performance testing for leakage. Residential Duct systems must be tested unless all ducts and equipment are located within the conditioned space. Envelope testing is required to demonstrate compliance with maximum allowable leakage rate unless a detailed air barrier and insulation inspection has been performed to field verify component criteria. This language puts the regulatory authority on notice that the testing requires specialized credentials and establishes a conflict of interest baseline).

*****Section R402.4.1.2 Testing; modify the first paragraph to read as follows:**

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in Climate Zones 1 and 2, and 3 air changes per hour in Climate Zones 3 through 8. *{Remainder of text unchanged}*

(Reason: The 2012 IECC will require mandatory door blower testing on each dwelling unit. The visual inspection is no longer an option to performance testing. This change will give some time for those builders not currently using a performance approach to adapt construction practices.)

If/when SECO does by rule adopt the 2012 IECC, this proposed amendment would be deemed less stringent and therefore would not be considered a recommended amendment.

*****R403.2.2 Sealing (Mandatory); Add a last paragraph to read as follows:**

Testing may only be performed by individuals that are certified HERS Raters or Rating Field Inspectors by RESNET or Performance Verification Technicians certified by Texas HERO, or other certifications as may be approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that installed the duct system.

(Reason: The 2012 International Residential Code (IRC) and International Energy Conservation Code (IECC) include enhanced emphasis on envelope infiltration and duct leakage. Significant changes in the residential energy requirements include more frequent requirement of performance testing for leakage. Residential Duct systems must be tested unless all ducts and equipment are located within the conditioned space. Envelope testing is required to demonstrate compliance with maximum allowable leakage rate unless a detailed air barrier and insulation inspection has been performed to field verify component criteria. This language puts the regulatory authority on notice that the testing requires specialized credentials and establishes a conflict of interest baseline).

***** Section R403.2.2; Amend to read as follows:**

R403.2.3 Building cavities (Mandatory). Building framing cavities shall not be used as supply ducts and plenums. Building framing wall cavities in the exterior thermal envelope shall not be used as return ducts

(Reason: Continue the practice in the regions and to insure that the building thermal envelope is not compromised.)

****Section C402.2.9/R402.2; Add Section C402.2.9 and R402.2.13 to read as follows:**

Section C402.2.9/R402.2 Insulation installed in walls. To insure that insulation remains in place, insulation batts installed in walls shall be totally secured by an enclosure on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting or other equivalent material approved by the building official.

(Reason: This will increase the performance of the insulation by ensuring that the batt insulation stays in place.)

*****Section R405.6.2; add the following sentence to the end of paragraph:**

Acceptable performance software simulation tools may include, but are not limited to, REM Rate™, Energy Gauge and IC3. Other performance software programs accredited by RESNET BESTEST and having the ability to provide a report as outlined in R405.4.2 may also be deemed acceptable performance simulation programs and may be considered by the building official.

(Reason: These performance software tools are accredited by RESNET at the time of recommendation.)

*****Section C101.4.3 Additions, alterations, renovations or repairs; add exception #9 to read as follows:**

9. Replacement of existing fenestration, provided, however, that the area of the replacement fenestration does not exceed 25% of the total fenestration area of an existing building and that the U-factor and SHGC will be equal to or lower than before the fenestration replacement.

(Reason: Provide some level of consideration for existing buildings, matches ASHRAE 90.1-2010 Exception "g" to Section 5.1.3.)

If/when SECO does by rule adopt the 2012 IECC, this proposed amendment would be deemed less stringent and therefore would not be considered a recommended amendment.

END

**Recommended Amendments to the
2012 International Fuel Gas Code**
North Central Texas Council of Governments region

The following sections, paragraphs, and sentences of the *2012 International Fuel Gas Code* are hereby amended as follows: Standard type is text from the IFGC. Underlined type is text inserted. ~~Lined through type is deleted text from IFGC.~~ A double asterisk at the beginning of a section identifies an amendment carried over from the 2009 edition of the code and a triple asterisk identifies a new or revised amendment with the 2012 code.

****Section 101.2**

{Local amendments to Section 101.2 may be necessary to correspond with the State Plumbing Licensing Law.}

****Section 102.2; add an exception to read as follows:**

Exception: Existing dwelling units shall comply with Section 621.2.

(Reason: Previous code provisions made unvented heater provisions retroactive except as provided for in local amendment. This amendment and amendment to IFGC 621.2 better clarify what the code already states: existing systems may stay unless considered unsafe.)

****Section 102.8; change to read as follows:**

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 8 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. 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 304.10; change to read as follows:**

304.10 Louvers and grilles. The required size of openings for combustion, ventilation and dilution air shall be based on the net free area of each opening. Where the free area through a design of louver, grille or screen is known, it shall be used in calculating the size opening required to provide the free area specified. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 25-percent free area and metal louvers and grilles will have ~~75~~50-percent free area. Screens shall have a mesh size not smaller than ¼ inch (6.4 mm). Nonmotorized louvers and grilles shall be fixed in the open position. Motorized louvers shall be interlocked with the appliance so that they are proven to be in the full open position prior to main burner ignition and during main burner operation. Means shall be provided to prevent the main burner from igniting if the louvers fail to open during burner start-up and to shut down the main burner if the louvers close during operation.

(Reason: This is the generally accepted practice in the region.)

****Section 304.11; change #8 to read as follows:**

304.11 Combustion air ducts. Combustion air ducts shall comply with all of the following:

1. Ducts shall be constructed of galvanized steel complying with Chapter 6 of the International Mechanical Code or of a material having equivalent corrosion resistance, strength and rigidity.

Exception: Within dwellings units, unobstructed stud and joist spaces shall not be prohibited from conveying combustion air, provided that not more than one required fireblock is removed.

2. Ducts shall terminate in an unobstructed space allowing free movement of combustion air to the appliances.
3. Ducts shall serve a single enclosure.
4. Ducts shall not serve both upper and lower combustion air openings where both such openings are used. The separation between ducts serving upper and lower combustion air openings shall be maintained to the source of combustion air.
5. Ducts shall not be screened where terminating in an attic space.
6. Horizontal upper combustion air ducts shall not slope downward toward the source of combustion air.
7. The remaining space surrounding a chimney liner, gas vent, special gas vent or plastic piping installed within a masonry, metal or factory-built chimney shall not be used to supply combustion air.

Exception: Direct-vent gas-fired appliances designed for installation in a solid fuel-burning fireplace where installed in accordance with the manufacturer's instructions.

8. Combustion air intake openings located on the exterior of a building shall have the lowest side of such openings located not less than 12 inches (305 mm) vertically from the adjoining ground level or the manufacturer's recommendation, whichever is more restrictive.

(Reason: To recognize the manufacturer's installation requirements.)

****Section 305.5; delete the section.**

(Reason: This provision does not reflect standard practice in this area. Consistent with regional amendment to IMC 304.6.)

*****Section 306.3; change to read as follows:**

[M] 306.3 Appliances in attics. Attics containing appliances requiring access shall be provided . . . *{bulk of paragraph unchanged}* . . . side of the *appliance*. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), ~~and~~ or larger where such dimensions are not large enough to allow removal of the largest *appliance*. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb (136 kg) capacity.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.
2. Where the passageway is not less than . . . *{bulk of section to read the same}*.

(Reason: To provide a safe means of accessibility to appliances in attics and to allow for different types of construction limitations. Consistent with regional amendment to IMC 306.3.)

*****Section 306.5; change to read as follows:**

[M] 306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, ~~an~~ a permanent interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than 8- 12 feet (2438 mm) to the finish grade or floor level below and shall extend to the equipment and appliances' level service space. Such access shall . . . *{bulk of section to read the same}*. . . on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). . . *{bulk of section to read the same}*.

(Reason: To assure safe access to roof appliances. Consistent with IMC amendments.)

****Section 306.5.1; change to read as follows:**

[M] 306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed ~~on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater~~ on roofs having slopes greater than 4 units vertical in 12 units horizontal and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*.

(Reason: To assure safe access to roof appliances. Consistent with IMC amendments.)

****Section 306; add Section 306.7 with exception and subsection 306.7.1 to read as follows:**

306.7 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger when approved by the *code official*) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

306.7.1. Illumination and convenience outlet. Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with Section 306.3.1.

(Reason: To provide more stringent safe access to water heaters. Consistent with regional amendments to IPC 502.5 and IMC 306.6.)

****Section 401.5; add a second paragraph to read as follows:**

Both ends of each section of medium pressure corrugated stainless steel tubing (CSST) shall identify its operating gas pressure with an *approved* tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING
1/2 to 5 psi gas pressure
Do Not Remove"

(Reason: To protect homeowners and plumbers.)

****Section 402.3; add an exception to read as follows:**

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EHD).

(Reason: Pipe less than 1/2" has a history in this region of causing whistling.)

*****Section 404.12; change to read as follows:**

404.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 42 18 inches (305 458 mm) top of pipe below grade, except as provided for in Section 404.10.1.

(Reason: To provide increased protection to piping systems and address reference number change.)

*****Section 404.12.1; change to read as follows:**

404.12.1 Individual outside appliances. Individual lines to outside lights, grills or other appliances shall be installed a minimum of 8 12 inches (203 mm) top of pipe below finished grade, provided that such installation is approved and is installed in locations not susceptible to physical damage.

(Reason: To provide increased protection to piping systems and address reference number change.)

****Section 406.1; change to read as follows:**

406.1 General. Prior to acceptance and initial operation, all piping installations shall be inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 406.1.1 through 406.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

(Reason: To utilize language used in the IPC regarding who is responsible for testing procedures.)

****Section 406.4; change to read as follows:**

406.4 Test pressure measurement. Test pressure shall be measured with a monometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. ~~Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure.~~

(Reason: To require the use of more accurate diaphragm gauges. Spring gauges do not provide accurate measurement below approximately 17 psig.)

****Section 406.4.1; change to read as follows:**

406.4.1 Test pressure. The test pressure to be used shall be no less than 4-1/2 times the proposed maximum working pressure, but no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. ~~irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.~~ For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 1/2"), a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 1/2"), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

(Reason: To provide for lesser pressures to coordinate with the use of more accurate diaphragm gauges.)

****Section 406.4.2; change to read as follows:**

406.4.2 Test duration. Test duration shall be held for a length of time satisfactory to the Code Official, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be

held for a length of time satisfactory to the Code Official, but in no case for less than thirty (30) minutes.
(Delete remainder of section.)

(Reason: To comply with accepted regional practices.)

****Section 409.1; add Section 409.1.4 to read as follows:**

409.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an *approved* termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.

(Reason: To provide proper security to CSST valves. These standards were established in this region in 1999 when CSST was an emerging technology.)

****Section 410.1; add a second paragraph and exception to read as follows:**

Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

(Reason: To require adequate access to regulators.)

****Section 621.2; add exception as follows:**

621.2 Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing *approved* unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when *approved* by the Code Official unless an unsafe condition is determined to exist as described in Section 108.7.

(Reason: Gives code official discretion.)

****Section 624.1.1; change to read as follows:**

624.1.1 Installation requirements. The requirements for water heaters relative to access, sizing, relief valves, drain pans and scald protection shall be in accordance with the *International Plumbing Code*.

(Reason: To clarify installation requirements. Also corresponds with amendments regarding water heater access.)

END

**Recommended Amendments to the
2012 International Fuel Gas Code**
North Central Texas Council of Governments region

The following sections, paragraphs, and sentences of the *2012 International Fuel Gas Code* are hereby amended as follows: Standard type is text from the IFGC. Underlined type is text inserted. ~~Lined through type is deleted text from IFGC.~~ A double asterisk at the beginning of a section identifies an amendment carried over from the 2009 edition of the code and a triple asterisk identifies a new or revised amendment with the 2012 code.

****Section 101.2**

{Local amendments to Section 101.2 may be necessary to correspond with the State Plumbing Licensing Law.}

****Section 102.2; add an exception to read as follows:**

Exception: Existing dwelling units shall comply with Section 621.2.

(Reason: Previous code provisions made unvented heater provisions retroactive except as provided for in local amendment. This amendment and amendment to IFGC 621.2 better clarify what the code already states: existing systems may stay unless considered unsafe.)

****Section 102.8; change to read as follows:**

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 8 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. 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 304.10; change to read as follows:**

304.10 Louvers and grilles. The required size of openings for combustion, ventilation and dilution air shall be based on the net free area of each opening. Where the free area through a design of louver, grille or screen is known, it shall be used in calculating the size opening required to provide the free area specified. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 25-percent free area and metal louvers and grilles will have ~~75~~50-percent free area. Screens shall have a mesh size not smaller than ¼ inch (6.4 mm). Nonmotorized louvers and grilles shall be fixed in the open position. Motorized louvers shall be interlocked with the appliance so that they are proven to be in the full open position prior to main burner ignition and during main burner operation. Means shall be provided to prevent the main burner from igniting if the louvers fail to open during burner start-up and to shut down the main burner if the louvers close during operation.

(Reason: This is the generally accepted practice in the region.)

****Section 304.11; change #8 to read as follows:**

304.11 Combustion air ducts. Combustion air ducts shall comply with all of the following:

1. Ducts shall be constructed of galvanized steel complying with Chapter 6 of the International Mechanical Code or of a material having equivalent corrosion resistance, strength and rigidity.

Exception: Within dwellings units, unobstructed stud and joist spaces shall not be prohibited from conveying combustion air, provided that not more than one required fireblock is removed.

2. Ducts shall terminate in an unobstructed space allowing free movement of combustion air to the appliances.
3. Ducts shall serve a single enclosure.
4. Ducts shall not serve both upper and lower combustion air openings where both such openings are used. The separation between ducts serving upper and lower combustion air openings shall be maintained to the source of combustion air.
5. Ducts shall not be screened where terminating in an attic space.
6. Horizontal upper combustion air ducts shall not slope downward toward the source of combustion air.
7. The remaining space surrounding a chimney liner, gas vent, special gas vent or plastic piping installed within a masonry, metal or factory-built chimney shall not be used to supply combustion air.

Exception: Direct-vent gas-fired appliances designed for installation in a solid fuel-burning fireplace where installed in accordance with the manufacturer's instructions.

8. Combustion air intake openings located on the exterior of a building shall have the lowest side of such openings located not less than 12 inches (305 mm) vertically from the adjoining ground level or the manufacturer's recommendation, whichever is more restrictive.

(Reason: To recognize the manufacturer's installation requirements.)

****Section 305.5; delete the section.**

(Reason: This provision does not reflect standard practice in this area. Consistent with regional amendment to IMC 304.6.)

*****Section 306.3; change to read as follows:**

[M] 306.3 Appliances in attics. Attics containing appliances requiring access shall be provided . . . *{bulk of paragraph unchanged}* . . . side of the *appliance*. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), ~~and~~ or larger where such dimensions are not large enough to allow removal of the largest *appliance*. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

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3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.
2. Where the passageway is not less than . . . *{bulk of section to read the same}*.

(Reason: To provide a safe means of accessibility to appliances in attics and to allow for different types of construction limitations. Consistent with regional amendment to IMC 306.3.)

*****Section 306.5; change to read as follows:**

[M] 306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, ~~an~~ a permanent interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than 8- 12 feet (2438 mm) to the finish grade or floor level below and shall extend to the equipment and appliances' level service space. Such access shall . . . *{bulk of section to read the same}*. . . on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). . . *{bulk of section to read the same}*.

(Reason: To assure safe access to roof appliances. Consistent with IMC amendments.)

****Section 306.5.1; change to read as follows:**

[M] 306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed ~~on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater~~ on roofs having slopes greater than 4 units vertical in 12 units horizontal and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*.

(Reason: To assure safe access to roof appliances. Consistent with IMC amendments.)

****Section 306; add Section 306.7 with exception and subsection 306.7.1 to read as follows:**

306.7 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger when approved by the *code official*) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

306.7.1. Illumination and convenience outlet. Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with Section 306.3.1.

(Reason: To provide more stringent safe access to water heaters. Consistent with regional amendments to IPC 502.5 and IMC 306.6.)

****Section 401.5; add a second paragraph to read as follows:**

Both ends of each section of medium pressure corrugated stainless steel tubing (CSST) shall identify its operating gas pressure with an *approved* tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING
1/2 to 5 psi gas pressure
Do Not Remove"

(Reason: To protect homeowners and plumbers.)

****Section 402.3; add an exception to read as follows:**

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EHD).

(Reason: Pipe less than 1/2" has a history in this region of causing whistling.)

*****Section 404.12; change to read as follows:**

404.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 42 18 inches (305 458 mm) top of pipe below grade, except as provided for in Section 404.10.1.

(Reason: To provide increased protection to piping systems and address reference number change.)

*****Section 404.12.1; change to read as follows:**

404.12.1 Individual outside appliances. Individual lines to outside lights, grills or other appliances shall be installed a minimum of 8 12 inches (203 mm) top of pipe below finished grade, provided that such installation is approved and is installed in locations not susceptible to physical damage.

(Reason: To provide increased protection to piping systems and address reference number change.)

****Section 406.1; change to read as follows:**

406.1 General. Prior to acceptance and initial operation, all piping installations shall be inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 406.1.1 through 406.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

(Reason: To utilize language used in the IPC regarding who is responsible for testing procedures.)

****Section 406.4; change to read as follows:**

406.4 Test pressure measurement. Test pressure shall be measured with a monometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. ~~Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure.~~

(Reason: To require the use of more accurate diaphragm gauges. Spring gauges do not provide accurate measurement below approximately 17 psig.)

****Section 406.4.1; change to read as follows:**

406.4.1 Test pressure. The test pressure to be used shall be no less than 4-1/2 times the proposed maximum working pressure, but no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. ~~irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 1/2"), a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 1/2"), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.~~

(Reason: To provide for lesser pressures to coordinate with the use of more accurate diaphragm gauges.)

****Section 406.4.2; change to read as follows:**

406.4.2 Test duration. Test duration shall be held for a length of time satisfactory to the Code Official, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be

held for a length of time satisfactory to the Code Official, but in no case for less than thirty (30) minutes.
(Delete remainder of section.)

(Reason: To comply with accepted regional practices.)

****Section 409.1; add Section 409.1.4 to read as follows:**

409.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an *approved* termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.

(Reason: To provide proper security to CSST valves. These standards were established in this region in 1999 when CSST was an emerging technology.)

****Section 410.1; add a second paragraph and exception to read as follows:**

Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

(Reason: To require adequate access to regulators.)

****Section 621.2; add exception as follows:**

621.2 Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing *approved* unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when *approved* by the Code Official unless an unsafe condition is determined to exist as described in Section 108.7.

(Reason: Gives code official discretion.)

****Section 624.1.1; change to read as follows:**

624.1.1 Installation requirements. The requirements for water heaters relative to access, sizing, relief valves, drain pans and scald protection shall be in accordance with the *International Plumbing Code*.

(Reason: To clarify installation requirements. Also corresponds with amendments regarding water heater access.)

END