Memorandum



DATE August 30, 2013

Members of the Economic Development Committee: Tennell Atkins (Chair), Rick Callahan (Vice Chair), Jerry R. Allen, Scott Griggs, Lee Kleinman, Adam Medrano

SUBJECT Adoption of the 2012 International Construction Codes

On Tuesday, September 3, 2013, the Economic Development Council Committee will be briefed on the proposed adoption of the 2012 International Construction Codes. The Building Inspection Advisory, Examining and Appeals Board Committee recommended adoption of the codes and amendments on July 8, 2013. The material is attached for your review.

Please feel free to contact me if you need additional information.

Theresa O'Donnell Interim Assistant City Manager

C: The Honorable Mayor and Members of the City Council A.C. Gonzalez, Interim City Manager Ryan S. Evans, Interim First Assistant City Manager Thomas P. Perkins, Jr., City Attorney Rosa Rios, City Secretary Craig Kinton, City Auditor Judge Daniel Solis, Administrative Judge Jill A. Jordan, P.E., Assistant City Manager Forest E. Turner, Assistant City Manager Joey Zapata, Assistant City Manager Charles M. Cato, Interim Assistant City Manager Jeanne Chipperfield, Chief Financial Officer Edward Scott, City Controller Frank Librio, Public Information Officer David Cossum, Interim Director, Sustainable Development and Construction Karl Zavitkovsky, Director, Economic Development Elsa Cantu, Assistant to the City Manager - Council Office

Adoption of the 2012 International Construction Codes

Economic Development Committee September 3, 2013



Purpose

- Adoption of the 2012 International Construction Codes includes the following:
 - 2012 International Plumbing Code
 - 2012 International Mechanical Code
 - 2012 International Fuel Gas Code
 - 2012 International Residential Code
 - 2012 International Building Code

Background

- Code Adoptions and Recommendations
 - Construction codes are written by national and international model code development organizations, with opportunity for input from building and fire officials, the construction industry and building material suppliers.
 - Codes are then reviewed by regional entities such as the North Central Texas Council of Governments who have committees for that purpose made up of local construction industry representatives and city and county building, fire and health officials.
 - The codes are then adopted by the municipalities with regional and local amendments.

Background

- Code Adoptions and Recommendations
 - The North Central Texas Council of Governments (NCTCOG) has recommended approval and adoption, with regional amendments.
 - The Building Inspection Advisory, Examining and Appeals Board reviewed and recommended adoption on July 8, 2013.
 - The board is made up of architects, engineers, and contractors in various specialties and construction trades.

2012 IPC - Dallas Plumbing Code

- International Code Council (ICC) Changes
 - Uniformity with other "I" codes
 - Definitions and refined explanations to code requirements
 - Recognize new waterproof materials to be used as shower floors
 - Identification of all Non-Potable water lines
 - Indirect waste connection of Food Service plumbing fixtures

NCTCOG Amendments

- Access strengthened to Attic/Roof installation of appliances or water heaters
- Ladder must have minimum 300 lbs. capacity
- Walkway must be rated as a floor
- <u>Results</u> added safety to service personnel/owners



2012 IPC - Dallas Plumbing Code

- Dallas Amendments
 - Grease Interceptor / Trap Sizing
 - Allow the design professionals to size interceptors based upon the anticipated conditions of use as required by the code
 - Allow the design professionals to use nationally accepted sizing criteria for grease exposure as allowed by code
 - <u>Reason</u>: Improved cost efficient installation, use and long term maintenance for restaurateur

2012 IPC - Dallas Plumbing Code

- Water Reuse Systems
 - Expanded code to include other forms of water reuse
 - Condensate water collection
 - Rinse Water reuse
 - Car Wash reuse
 - Cooling Tower reuse
 - Recognize Rain Water harvesting for irrigation use, etc.
 - Gray water systems for flushing of water closets & urinals
 - <u>Results</u>
 - Comprehensive plumbing code utilizing nationally recognized water saving practices and technology
 - Cost savings to business owners, homeowners and the City of Dallas
 - Promote the "Green" concept of using alternative water sources



2012 IMC - Dallas Mechanical Code

ICC Changes

- Enclosed Parking Garage ventilation systems can be operated automatically by carbon monoxide detectors
- Independent Exhaust System required
- Kitchen, bath, clothes dryer, etc. require independent ducts to the outside
- Criteria for Grease Reservoirs and openings into Grease Duct Systems
- Type I Commercial Kitchen Hood Exemption & Label requirements
- Minimum Ventilation of Nail Salons

2012 IMC - Dallas Mechanical Code

NCTCOG Amendments

- Strengthen Safety standards
 - Access to Attic/Roof installation of appliances or water heaters
 - Ladder must have minimum 300 lbs. capacity
 - Walkway must be rated as a floor
 - <u>Results</u> added safety to service personnel/owners



2012 IFGC – Dallas Fuel Gas Code

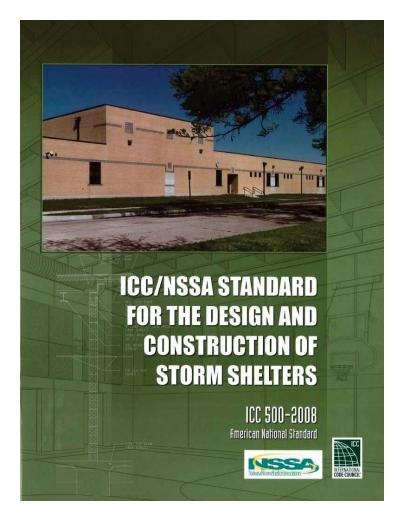
ICC Changes

- Clarification of Code language
- Uniformity with other "I" Codes

NCTCOG Amendments

- Strengthen Safety standards
 - Access to Attic/Roof installation of appliances or water heaters
 - Ladder must have minimum 300 lbs. capacity
 - Walkway must be rated as a floor
 - <u>Results</u> added safety to service personnel/owners

- ICC Changes
 - Storm Shelters
 - Must comply with ICC and National Storm Shelter Association (NSSA) Standard
 - The Standard ICC 500– 2008 has provisions for shelters provided for residential uses or commercial/public uses.





- Carbon Monoxide Alarms Required in Single-Family Homes
 - <u>Reason</u>: Unsafe carbon monoxide levels in the home are typically from faulty operation of fuelfired appliances or automobile exhaust
- Recognize certain waterproof materials to be used as shower floors
- Simplified dryer exhaust requirements
- Recognition of Thermal and Photovoltaic Solar Energy Systems

- NCTCOG Amendments
 - Strengthen Safety standards
 - Access to Attic/Roof installation of appliances or water heaters
 - Ladder must have minimum 300 lbs. capacity
 - Walkway must be rated as a floor
 - <u>Results</u> added safety to service personnel/owners



- Dallas Amendments
 - Water Reuse Systems
 - Expanded code to include other forms of water reuse such as:
 - Condensate Water Collection
 - Rinse Water
 - Recognize Rain Water harvesting for irrigation use, etc.
 - Gray water systems for flushing of water closets & urinals
 - <u>Results</u>
 - Cost savings to homeowners and the City of Dallas
 - Promote the "Green" concept of using alternative water sources where possible

ICC Changes

- Major Changes in High–Rise Provisions
 - Emergency Responder Radio Coverage required
 - <u>Reason</u>: Reliability of portable radios used by emergency responders inside of buildings is a concern
 - Smoke Removal Capability Required
 - <u>Reason</u>: Fire department must expel the smoke after the fire has occurred
 - Additional Exit Stairway Required for Buildings more than 420 Feet in Height
 - <u>Reason</u>: Fire Department must take control of one stairway, the one most appropriate to the circumstances of the fire condition

- Major Changes in High–Rise Provisions (cont.)
 - Luminous Egress Marking Required
 - <u>Reason</u>: Increased visibility on stairways and exit passageways is important in emergency conditions
 - Protected Elevator Lobbies Required
 - <u>Reason</u>: Reduce potential for smoke to travel from the floor of fire origin to another floor through an elevator shaft enclosure
 - Two-Way Communication Systems Required in areas of Refuge
 - <u>Reason</u>: Offers a means of communication to disabled individuals needing assistance during an emergency situation



- Major Changes in High–Rise Provisions (cont.)
 - Fire Service Elevator Required
 - <u>Reason</u>: Facilitate the rapid deployment of fire fighters
 - Increased Structural Integrity Required for Buildings Classified in Risk Category IV or III
 - Risk Category IV designated emergency shelters and designated emergency response facilities
 - Risk Category III public assemblies with an occupant load greater than 300
- Enhanced Communications for Schools
 - <u>Reason</u>: School campus safety concerns during a lock down situation for kindergarten through 12th-grade students

- Dallas Amendments
 - The Building Inspection Advisory, Examining and Appeals Board considered an amendment to address exterior solar reflectance
 - Staff is recommending this issue be deferred for additional study
 - Staff is working with interested stakeholders to establish a working group to consider this issue



Proposed Ordinances

 Available for viewing at the Building Inspection Administration Office, Oak Cliff Municipal Center. Room 115 or the City Manager's Office, Dallas City Hall.



Recommendation

 Recommend adoption of the 2012 International Codes and direct staff to report back to the committee on the reflectivity issue.





Next Steps

 Schedule City Council action on adoption of the 2012 International Codes.

