



City Council Agenda Item Summary Report

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| Meeting Date: November 15, 2022 | | | |
| Submitted by: P. Morgan | | | |
| Consent | Discussion Only | Public Hearing | Action/Discussion X |
| Item Title: Discuss and consider approval of an Ordinance amending the Code of Ordinances by adopting the 2021 Edition of the International Building Code. | | | |
| Attachments: Ordinance | | | |

Item Summary:

The City of Forney currently requires construction under the 2018 International Code Series, including the Fire Code, and the 2017 National Electrical Code. Staff has prepared the Ordinances to adopt the 2021 International Code Series, including the Fire Code, and the 2020 National Electrical Code. The amending ordinances include the following:

1. 2021 International Building Code
2. 2021 International Residential Code
3. 2021 International Existing Building Code
4. 2021 International Plumbing Code
5. 2021 International Mechanical Code
6. 2021 International Fuel Gas Code
7. 2021 International Fire Code
8. 2021 International Property Maintenance Code
9. 2021 International Energy Conservation Code
10. 2021 International Swimming Pool and Spa Code
11. 2020 National Electrical Code

The codes are adopted together as a series since the codes are fully compatible with each other and provide many cross references. The purpose of the code series is to provide an international model code forum and to provide consistency across the region.

The main purpose of updating codes is to maintain up-to-date codes that address design and installation of building systems through requirements which emphasize performance and safety. In addition, updating the codes is an important factor in securing a higher rating with the Insurance Service Organization (ISO). ISO is an advisory organization which provides ratings for each City's building and fire departments. A higher rating may provide insurance benefits and cost savings for citizens. The City of Forney currently has earned the highest achievable fire rating and an above average building rating. Updated codes are necessary to maintain those ratings.

The Ordinance proposes to adopt the Codes with the inclusion of recommendations made by the North Central Texas Council of Governments (NCTCOG). Since 1967, the NCTCOG has promoted the standardization of model construction codes in an effort to simplify the construction process, advance the safety of building systems, promote common code interpretation, and reduce training and construction costs. The recommendations are made by a committee comprising of local public and private code

professionals. The City of Forney's current 2018 codes include previous NCTCOG recommendations.

2021 International Building Code:

The purpose of this specific item is to adopt the 2021 Edition of the International Building Code. The provisions of the code apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

The International Code Council website provides the following list of important changes:

- Puzzle rooms (escape rooms) are now defined and regulated as special amusement areas, requiring compliance with Section 411 and special means of egress requirements.
- For the purposes of determining the allowable number of control areas in a building, each portion separated by one or more fire walls is now considered as a separate building.
- In Group E occupancies, enhanced classroom acoustics in compliance with ICC A117.1 are to be provided in all classrooms having of volume of 20,000 cubic feet or less.
- The requirements for metal composite materials and systems (MCM) installed on the exterior walls of Types I, II, III and IV construction were simplified and sprinkler allowances were deleted.
- The use of intermodal shipping containers as buildings is now specifically addressed through provisions intended to supplement existing applicable IBC requirements.
- Automatic sprinkler protection is now required in Group S-2 open parking garages where any fire area exceeds 48,000 square feet.
- The 2017 edition of ICC A117.1 was adopted.
- Parapets of a minimum height are now required for aggregate-surfaced roofs to prevent blow-off.
- Mixed occupancy buildings with assembly spaces are placed in Risk Category III when the total public assembly occupant load is greater than 2500 people.
- The 2021 IBC snow map is updated to match ASCE 7-16 snow maps by adding a reference to ASCE 7 snow tables in states with large case study areas.
- Secondary rain loads are updated to be consistent with ASCE 7.
- Special inspection requirements were added to address the anchorage and connection of mass timber structural elements.
- Installation of firestop, fire-resistant joint systems and perimeter fire barrier systems in residential-use buildings now requires special inspection in Group R fire areas having an occupant load exceeding 250 people.
- Frost protection for egress doors was added to the foundation requirements.
- ACI standards ACI 117 and ITG 7 were added by reference to provide acceptable tolerances for concrete construction.

Recommendation:

Staff recommends approval, with an effective date of January 1, 2023.