



CITY OF HOUSTON - CITY COUNCIL

Meeting Date: 10/17/2023

ALL

Item Creation Date:

HPW 20HPC02 - Ordinance to Update the Houston Construction Code

Agenda Item#: 19.

Summary:

ORDINANCE relating to the adoption of Construction Codes for the protection and preservation of lives and property from fire and other perils; adopting Amendments to the City of Houston Construction Code and containing other provisions relating to the foregoing subjects; declaring an effective date; containing a repealer

Background:

SUBJECT: Ordinance to adopt the latest editions of the Building Code, Residential Code, Mechanical Code, Plumbing Code, Fire Code, Existing Building Code, Swimming Pool and Spa Code, Energy Conservation Code, Electrical Code, and amendments.

RECOMMENDATION: It is recommended that City Council approve an Ordinance to modify and update the Houston Construction Code to the 2021 code editions with local administrative provisions that coordinate with local ordinances and conform with local construction practices.

SPECIFIC EXPLANATION:

The purpose of this request is to pass an Ordinance adopting the 2021 International Building Code (IBC), 2021 International Existing Building Code (IEBC), 2021 International Residential Code (IRC), 2021 International Fire Code (IFC), 2021 International Swimming Pool and Spa Code (ISPSC), 2021 International Energy Conservation Code (IECC), 2021 Uniform Mechanical Code (UMC), 2021 Uniform Plumbing Code (UPC), 2023 National Electrical Code (NEC), with Houston Amendments thereto, to continue to set the minimum standards of building regulations in residential and commercial buildings located on private property. Establishment of these standards will increase resilience, minimize the probability of fire situations, and protect the welfare of the public.

The adoption of the aforementioned codes is recommended because of the Building Code Effectiveness Grading Schedule (BCEGS) classification by the Insurance Services Office (ISO). The BCEGS requires that a jurisdiction adopts building codes, conducts plan reviews and inspections, and provides training to staff. During the BCEGS evaluation ISO will assess the edition of building codes in effect in a particular community and how that community enforces its adopted building codes with special emphasis on resilient construction mitigation from natural hazards, and then provide the city with a rating credits classification. This rating affects the individual property insurance policies in recognition of community efforts to mitigate property damage due to natural hazards and additionally impacts the City's participation in the National Insurance Flood Program. The City was recently evaluated by ISO and received a decrease in our BCEGS rating due to the enforcement of outdated building codes. Adoption of the latest editions of the International Code Council (ICC), International Association of Plumbing and Mechanical Officials (IAPMO), and National Fire Protection Association (NFPA) building codes will ensure the City is able to increase its BCEGS rating upon request to ISO for reevaluation.

Additionally, the adoption of the aforementioned codes will also include an update to the ASCE 7 standard that is referenced by the International Building Code and International Residential Code from the 2016 edition to the 2022 edition. The ASCE 7-22 Standard, or the Minimum Design Loads and Associated Criteria for Buildings and Other Structures, is published by The American Society of Civil

Engineers (ASCE) to provide minimum loads, hazard levels, associated criteria, and intended performance goals for buildings, other structures, and their nonstructural components that are subject to building code requirements. This change will provide up-to-date requirements and better, more recently gathered engineering data for structural design in Houston.

The International Building Code (IBC) is published by the International Code Council. The IBC regulates the standards in structural application, fire and life safety, and administrative enforcement. The IBC is the nationally recognized building code adopted in most jurisdictions and is the minimum code standard for construction in the City, as established by Sec. 214.216 of the Local Government Code.

The International Residential Code (IRC) is published by the International Code Council and is the minimum code standard for one- and two-family dwellings, excluding the electrical provisions, as established by Sec. 214.212 of the Local Government Code.

The International Existing Building Code (IEBC) is published by the International Code Council and is the minimum code standard for repair, alteration, change of occupancy, addition to and relocation of existing buildings.

The International Fire Code (IFC) is published by the International Code Council and is the minimum code standard for fire prevention and fire protection systems using prescriptive and performance-related provisions.

The International Swimming Pool and Spa Code (ISPSC) is published by the International Code Council and is the minimum code standard for controlling the design, construction, installation, quality of materials, location and maintenance or use of pools and spas, as established by Sec. 214.103 of the Local Government Code.

The International Energy Conservation Code (IECC) is published by the International Code Council and is the minimum code standard for the energy-efficient buildings using prescriptive and performance-related provisions.


The Uniform Mechanical Code (UMC) and Uniform Plumbing Code (UPC) are published by the International Association of Plumbing and Mechanical Officials and regulate the installation, repair, and alteration of mechanical and plumbing systems primarily in commercial and residential multifamily construction. The amendments to these codes establish certain administrative policies and procedures as well as modify other base code principles to be more applicable to the welfare and safety of the citizens of Houston.

The National Electrical Code (NEC) is published by the National Fire Protection Association, and is the national standard for the Electrical industry. The NEC is also adopted by State Law, Chapter 1305 – Title 8 of the Texas Occupations Code for the installation, maintenance, and repair of electrical work. The NEC will be updated from the 2020 version to the 2023 version.

The update to permit fees associated with one- and two-family residential and townhouse construction is not an increase in fees but a change to the number of decimal points in the fees that will assist in easier fee calculations.

The proposed amendments were reviewed under the Construction Code Modernization Project by designated Task Force Groups comprised of both City officials and community stakeholders, as well as the Construction Code Modernization Committee comprised of over 200 community stakeholders representing more than 50 construction and industry associations.

A public meeting was held on August 24, 2023 as part of the Transportation, Technology and Infrastructure Council Committee Meeting.

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 10/9/2023
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Carol Ellinger Haddock, P.E., Director
Houston Public Works

Prior Council Action:

- Ordinance No. 2023-0151, 03/01/2023
- Ordinance No. 2023-0064, 01/25/2023
- Ordinance No. 2021-1037, 12/01/2021
- Ordinance No. 2016-0865, 11/09/2016
- Ordinance No. 2016-0718, 09/21/2016

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ATTACHMENTS:

Description	Type
TTI Committee Agenda for Aug. 24 Meeting	Backup Material
2015 Houston Amendments Prior Council Actions	Backup Material
Caption	Other
Exhibit A-1	Contract/Exhibit
Exhibit B	Contract/Exhibit
Exhibit C-1	Contract/Exhibit
Exhibit D-1	Contract/Exhibit
Exhibit E-1	Contract/Exhibit
Exhibit F-1	Contract/Exhibit
Exhibit G-1	Contract/Exhibit
Exhibit H-1	Contract/Exhibit
Exhibit I-1	Contract/Exhibit
Exhibit J-1	Contract/Exhibit
Exhibit L	Contract/Exhibit
Ordinance	Ordinance/Resolution/Motion