



BUILDING SAFETY CODE UPDATE

CITY COUNCIL MEETING – October 4, 2022

City Staff Representatives:

Matt Rowland, Chief Building Official



HISTORY

Codes of Hammurabi – 2000 BC

“In the case of collapse of a defective building, the builder is to be put to death if the owner is killed by accident; and the builder’s son if the son of the owner loses his life...”

Socrates –341 BC

“He shall set the joists against each other, fitting, and before inserting the dowels he shall show the architect all the stones to be fitting, and shall set them true and sound and dowel them with iron dowels, two dowels to each stone...”



STRATEGIC FOCUS AREA

*Supportive, Financial
Infrastructure*



ORIGINS OF MODERN CODES

- Insurance industry: Establish standards to minimize accidents/claims.
- Social organizations: Eliminate squalor and impact on health.
- Local governments: Develop regulations to deliver health and safety to taxpayers.
- Disasters: Mitigate loss of life and property based on public demand.



WHAT ARE BUILDING CODES?

Building codes specify the minimum legal design and construction requirements for the City:

- Structural integrity
- Construction materials
- Fire protection
- Consistent standard



WHO IS INVOLVED IN DEVELOPING THE CODES?



- The International Code Council (ICC) develops codes in collaboration with:
 - Federal Emergency Management Agency (FEMA)
 - Other Federal, states, local and private authorities



WHO IS INVOLVED IN DEVELOPING THE CODES?

- ▶ National Fire Protection Association
 - ▶ Codes and standards for life safety and electric systems.





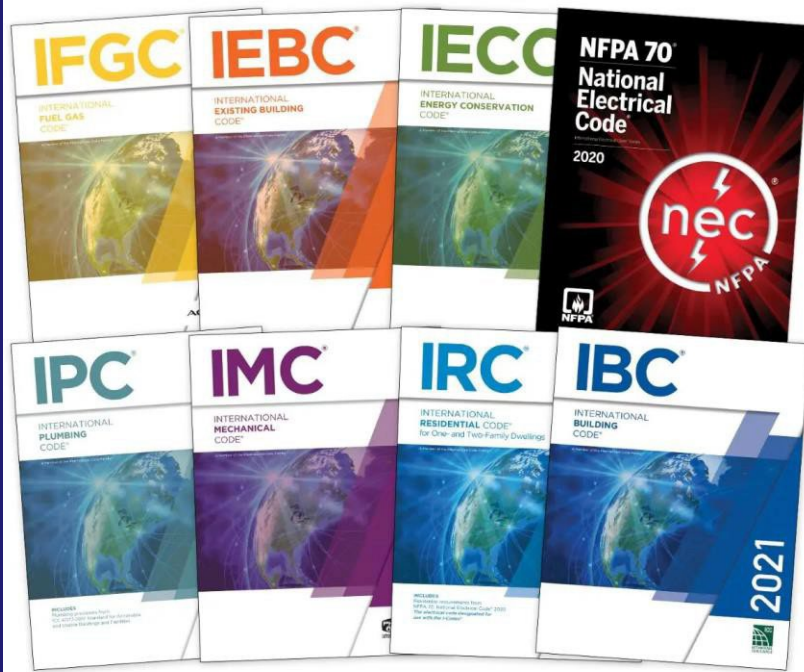
WHERE ARE WE NOW?

- We are currently enforcing the 2018 International Codes and the 2020 National Electric Code.
- These codes were adopted in October of 2020, with amendments



Codes Proposed

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL FIRE CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL EXISTING BUILDING CODE
- 2021 INTERNATIONAL SWIMMING POOL AND SPA CODE
- 2021 INTERNATIONAL PROPERTY MAINTENANCE CODE
- ASME A117.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS 2019





CODES PROPOSED

The adoption is to replace the currently adopted codes with the newer version, commonly known as Code-Cycle



Brighton Building Code

This comprehensive building code establishes minimum regulations for building systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new building designs.



Brighton Residential Code

- This comprehensive, stand-alone residential code establishes minimum regulations for one- and two-family dwellings and townhouses using prescriptive provisions. It is founded on broad-based principles that make possible the use of new materials and new building designs.



BRIGHTON RESIDENTIAL CODE AMENDMENTS

This section is in alignment with previous versions that the City has adopted and has been amended by many municipalities:

Section 15-28-50 - R313.2 One- and two-family dwelling automatic fire sprinkler systems. An automatic residential fire sprinkler system shall “may” be installed in one and two-family dwellings.

Sec. 15-28-60. – Section R403.1.6, amended.

Wood sill plates and wood walls supported directly on continuous foundations shall be anchored to the foundation in accordance with this section. Studies have shown common failure in the anchoring systems with smaller plate anchors. This amendment specifies larger diameter anchor bolts and washers.



Brighton Mechanical Code

This comprehensive mechanical code establishes minimum regulations for mechanical systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new mechanical designs



Brighton Plumbing Code

This comprehensive plumbing code establishes minimum regulations for plumbing systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new plumbing designs



Brighton Fuel Gas Code

This comprehensive fuel gas code establishes minimum regulations for fuel gas systems and gas-fired appliances using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new fuel gas system and appliance designs.



Brighton Energy Conservation Code

This comprehensive energy conservation code establishes minimum regulations for energy efficient buildings using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new energy efficient designs.

We are removing any amendments to make it easier to comply with Colorado House Bill 22-1362.



Brighton Existing Building Code

This code is founded on principles intended to encourage the use and reuse of existing buildings that adequately protect public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.



Brighton Property Maintenance Code

The Brighton Property Maintenance Code is a code that regulates the minimum maintenance requirements for existing buildings.

The Brighton Property Maintenance Code is a maintenance document intended to establish minimum maintenance standards for basic equipment, light, ventilation, heating, sanitation and fire safety. Responsibility is fixed among owners, operators and occupants for code compliance. The BPMC provides for the regulation and safe use of existing structures in the interest of the social and economic welfare of the community



Brighton Fire Code

A modern, up-to-date fire code addressing conditions hazardous to life and property from fire, explosion, handling or use of hazardous materials and the use and occupancy of buildings and premises.

This comprehensive fire code establishes minimum regulations for fire prevention and fire protection systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new system designs.



BRIGHTON ELECTRIC CODE

This code will follow the same adoption as required by the State of Colorado Board. This is required by Statute and will save repeated adoptions every 3 years as the State changes the requirement.

We anticipate to bring an update to the 2023 National Electric Code in the 2nd quarter of 2023.



Contractor Licensing

This section is identical to the current code and may be updated at a later time at the discretion of the City Council



Safety Code for Elevators and Escalators

This code is being revised to match the State of Colorado requirements.



External Agency Input

The update has been sent to the Metro Homebuilders Association with no objections indicated.

Both City and Fire District Staff have had input on the proposal.



Code Cycle Comparison for Surrounding Jurisdictions

- The following Cities are in the process or have completed the code cycle:
- BROOMFIELD
- WESTMINSTER
- FT. COLLINS
- LONGMONT
- AURORA
- SEVERAL OTHERS ALONG THE FRONT RANGE



Question and answers

City and Fire district staff are available to answer any questions.