Building, Fire, Energy Codes, & the Green Buildings Ordinance (GBO)

Errata and Clarifications Update

Presented by: Community Planning and Development

In partnership with:

The Office of Climate Action, Sustainability, and Resiliency and

The Denver Fire Department

Within this Presentation:

City Council passed a complete package of Building, Fire, Energy, and other code amendments on January 12, 2023.

What is before you today: A small selection of revisions that include corrections for typographical and grammatical errors, mis-referenced subsections, and clarifications.

This presentation covers the short list of changes that are beyond a typo or incorrect code reference.

Administrative, Building & Energy Codes

1. **Administration (Chapter 1) 131.4** – Added language that clarifies homeowners are not permitted to excavate basements for a new home or home addition on their property if more than 4-feet deep.

2. **Building Code 1107** – Accessible and Universal EV Parking – Revised language to clarify size, quantity, and signage for accessible and universal EV parking/charging spaces.

3. **Energy Code C103.2.3** – Provides information to the design team and building owner(s) for necessary design coordination with 2030 targets in the Energize Denver Ordinance.

4. **Energy Code C404.10** – Added an exception for boiler fuel source in alignment with the Energize Denver Ordinance.

Energy Code

5. **Energy Code C407.1** – Defines the criteria and numerical values for modeling infiltration (air leakage) based on the total building performance methodology in accordance with Appendix G of energy standard ASHRAE 90.1.

6. **Energy Code C407.3.3** – Deleted language that already appears in other sections of the energy code.

7. **Energy Code Table C407.3** – Building Performance Factors (BPFs) – Adjusts the BPFs for buildings that are *not* all-electric to align with Denver's overall energy and fossil fuel reduction goals. Ensures that fossil fuels are not afforded a design advantage when compared to electric equipment.

8. **Energy Code C503.3.3** – Added an exception for small room-type air conditioner units known as "PTACs" and "VTACs" because permitting requirements for these do not go into effect until 2025 per the Energize Denver Ordinance. There are limited options for cold climate PTHPs and VTHPs which would replace PTACs and VTACs, therefore the Energize Denver Task Force recommended permit changes start in 2025.

Fire Code

9. **Fire Code 503.1.1** – This change exempts accessory dwelling units (ADUs), which are smaller in size and contain fewer occupants, from restrictive hose length coverages and avoids sprinklers that are not normally required in residential buildings in Denver.

10. **Fire Code 510.4.1** – This change ensures radio enhancement system cabling (used by emergency responders to communicate within a building) is equivalently protected to the fire rating of the structure which it serves. This aligns Denver Code with current language in the national standard which is already adopted by Denver.

11. **Fire Code 3303.5** – This change incorporates into Denver's code a change already made at the national level. The previous provision required covering flooring in mass timber construction with a non-combustible protection during construction. This proved to be expensive and not feasible, resulting in the change nationally and locally.

Green Buildings Ordinance (GBO) and Rules & Regulations

A. Added definitions to coordinate with 2022 Denver Energy Code and clarity regarding when roof work triggers GBO requirements
   - This includes an exception for limited roof work (20% or less of roof area) so rooftop units (RTUs) can be replaced without triggering full GBO requirements, when the existing roof is in good condition and is not being recovered or replaced.

B. For new construction projects (excluding additions or alterations) that choose either the 12% improved energy efficiency or onsite green space plus 5% improved energy efficiency path, we aligned requirements with the Denver Energy Code / Energize Denver Ordinance and will require all-electric. This will ensure these GBO paths are updated to continue to produce a layer of improved performance beyond what is expected simply by meeting the energy code's standard requirements.

C. Added option to satisfy up to 25% of required onsite rooftop solar through payment into the Green Building Fund, similar to existing allowance already included in the GBO for onsite green space. This supports projects pursuing compliance using the onsite solar path, but that fall just short of meeting the full area coverage requirements.

D. Coordinated updates in the GBO Rules & Regulations document that align with ordinance changes and provide clarity on implementation, for which there will be a separate public hearing in June 2023. Rules and regulations are administratively adopted.

Thank You

Questions?

Contacts:

Eric Browning, Chief Building Official, CPD
eric.browning@denvergov.org 720-865-2815

Antonio Caro, Fire Protection Manager, DFD
antonio.caro@denvergov.org 720-865-2963

Courtney Anderson, Administrator NZNB&H, CASR
courtney.Anderson@denvergov.org 720-865-5382