



# Building Codes

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# Overview



## **All ICC Codes:**

- **Reformatted Section 104 – Duties and powers of the building official as it applies to alternative materials and designs are evaluated.**
- **Updated most code references to their current versions and languages across the board, which affects numerous sections as it applies to structural, concrete, masonry and wood.**
- **The proposed adoptions can result in a cost-savings for property owners.**

# 7.1 Building Code



The 2024 IBC® applies to all buildings except detached one- and two-family dwellings and townhouses up to three stories.

- Updated risk categories, wind, earthquake, and snow loads which now include new provisions for tornado loadings.
- Occupiable roof clarifications, modifications & requirements (if a roof is usable for anything more than maintenance or repair)
- Adult-changing table requirements are now in the codes to apply where they are provided voluntary and when they are mandatory.
- Carbon Monoxide Detectors updated and now required in all occupancies where a CO-producing device is present.

## 7.2 Existing Building Code



2024 IEBC® covers repair, alteration, addition and change of occupancy for existing buildings. and historic buildings.

- Occupiable roofs requirements & risk categories updated to correlate with the IBC.
- Adult changing stations requirements added if one is required, and additional room is being added.
- Section 1502 was added to “address the need for the owner to properly develop, implement and maintain a site safety plan during construction”.

# 7.3 Electric Code



## 2023 NEC, Electric Code

- Hotels, Motels, and Assisted living facilities have the same branch circuit requirements as dwelling units (cooking)
- 10-amp branch circuits now allowed though very limited
- Battery powered light switches not allowed unless default is “on” if battery fails.
- Dimmers not allowed on stairs UNLESS each switch can bring the light back to maximum brightness.
- Energy Management Systems added – however it cannot be used to downgrade a mandatory EV charger.
- Energy Storage Systems – AHJ shall conduct or witness commissioning of the system upon installation and periodically afterwards (does not apply to one- or two-family dwellings)

# 7.4 Mechanical / 7.11 Fuel Gas Code



- Roof access – mandatory landings & guards now required.
- Cleaned up ventilation & exhaust rates for Group R buildings regardless of height.
- Adult changing stations require ventilation / also changed are rates for animals, outpatient healthcare, workrooms.
- Type 1 & 2 hoods – now lists lumens not watts for light testing & allows for water testing as another method. Naturally drafted appliances (Water heaters / furnaces) may not be in the same room.
- Numerous refrigerant changes added.

# 7.5 Fire Code



## 2024 Fire Code

- The fire code changes clarify requirements when fire alarms are to be installed. There was an increase to the sprinkler requirement in existing buildings from 100 occupants to 200 occupants in A2 occupancies. This was increased to be more business friendly for restaurants that were considering moving into existing spaces that the sprinkler system requirement would be an extra burden.
- Fire alarms will still be required in these spaces as the compromise and less costly for the business owners. We added a requirement in Chapter 61 for vehicle impact protection for LP-Gas containers sold at gas stations and some retail establishments.
- Lastly we carried the IRC sprinkler requirements into the IFC as an approved added appendix which was written by the code commission and fire department personnel and approved at a commission meeting in March of 2024.

# 7.6 Residential Code



- Solar and Battery systems – numerous additions & clarifications including mandatory impact protection.
- Energy – windows U Factor improved while ceiling/attic R-Value amount decreased. .30 to .28 & R60 to R49.
- Duct leakage requirements are now based on the number of returns & include alterations where 25% or more of the ductwork is altered.
- Lighting controls now apply everywhere except for safety or security lighting.
- New construction requirements for insulation now apply to remodels, siding a house or whole section (or how to get as close as possible).
- Substantial improvements require additional efficiency credits.
- Ventilation / Exhaust – changed from 3' to 1' for bath, kitchen, laundry exhaust for windows. Makeup air requirements updated & now include bathrooms.
- No outlets allowed under countertops which includes islands. Islands are no longer required to have an outlet installed but must be prewired for one to be installed.
- All outlets in the kitchen to be GFCI protected.
- Lights installed in fire rated assemblies must be listed or utilize a listed enclosure.



# 7.13 Energy Code



## 2023 NEC, Electric Code

- DOE Residential: “National” energy savings of 6.8% percent and approximately 6.6% on energy cost savings. Residential items are covered under the IRC above.
- Commercial is not reviewed by DOE & significant changes is still not published. With that – Colorado has reviewed & noted:
- 76 definition changes
- Steel studs no longer have a cavity only insulation value / must have some sort of thermal break / insulation.
- Tightened air leakage requirements & increased list of items to show air barrier design & documentation of it.
- Numerous mechanical, ventilation, and control sections updated including interlocks for openings larger than 40 SF. Bathroom exhaust fans may not run continuously.
- Lighting controls amped up along with switched outlet requirements which include vacation timeshare properties like VRBO, Booking, Airbnb
- Energy Monitoring required now at 10,000 SF down from 25,000- which aligns with VOP benchmarking regulations.

# 7.15 Pool Code



**There are no changes to the Pool Code, besides updating language to be consistent with the plumbing code.**



**Questions?**