What are the Requirements?
To meet the requirements of the residential provisions of the 2022 Denver Energy Code (DEC) projects may select from three different compliance options:

- Prescriptive + Additional Efficiency Packages (DEC Sections R401 through R404, and section R408)
- Total Building Performance (DEC Section R405)
- Energy Rating Index (ERI) (DEC Section R406)

How Does this Apply to Your Project?
**Prescriptive + Additional Efficiency Packages:**
The prescriptive compliance option requires projects to comply with all prescriptive for:

- Building thermal envelope
- Mechanical systems
- Electric power
- Lighting

Project teams must also select additional efficiency package options to meet the requirements in Section R408. The building thermal envelope assemblies may meet the prescriptive requirements by directly meeting prescriptive U-factors and R-values, or by modeling the envelope under the Total UA alternative, which allows for tradeoffs between the thermal performance of different assemblies. The prescriptive compliance option is the most common pathway for projects to choose, but it provides the least flexibility.

**Total Building Performance:**
The Total Building Performance option requires:

- Compliance with the mandatory measures listed in Table R405.2
- A whole building energy model that shows
  - 5% annual energy cost savings for all-electric properties
  - 18% annual energy cost savings for all other buildings

This pathway provides more flexibility and allows tradeoffs in envelope performance, but it does not allow tradeoffs with lighting, HVAC or service hot water.

**Energy Rating Index:**
The Energy Rating Index option requires:

- Compliance with the mandatory measures listed in Table R406.2
- A maximum ERI value of
  - 55 for all-electric properties
  - 50 for all other buildings

This pathway provides the most flexibility as envelope assemblies, building systems, and lighting are all considered in the ERI.

Why is this Important?
The three compliance options provide residential design teams the flexibility to select a pathway for energy compliance that is best suited to the individual project. Denver’s amendments to the International Energy Conservation Code (IECC) create parity between the efficiency of designs under each compliance option.

What is the Climate Impact?
The 2022 Denver Energy Code will reduce operational carbon emissions for residential new construction by 58% over the previous code. The amendments to these compliance options reduce the carbon impact of residential construction to align with Denver’s climate goals.