



# Commercial

## **Appendix PT: Performance Target**

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### What are the Requirements?

Appendix PT provides a pathway for specific types of commercial and multifamily residential projects to comply with a modeled performance target based on energy use intensity (pEUI with units of kBtu/sf). The project types allowed to use this pathway and their performance targets are show below in Table PT103.

- Energy use for data centers and EV charging can be excluded if metered separately
- Can include up to 10% on-site renewable energy
- Must follow the <u>Denver Modeling Rules and</u> Procedures

Projects must complete and submit the 2022 Denver Energy Code (DEC) Performance Path Checklist which identifies how the project is complying with the requirements. The energy modeling report is two parts, the 90.1 Appendix G Compliance Form and 2022 DEC Companion Tool. These reports and other energy model documentation is submitted when applying for permit.

Table PT103 Modeled Performance Targets	
Building Type	Modeled Performance Target (kBtu/sf)
Apartment (Multi-family)	38
Hotel (Motel)	55
Office	43
Retail	39
Restaurant/Bar	175

The project must comply with the mandatory requirements in the 2022 DEC as outlined in Section C407.2. For instance, air leakage testing follows the 2022 DEC Section C402.5. Other mandatory provisions follow ASHRAE 90.1-2019, such as mechanical equipment minimum efficiency. The project does not need to comply with 2022 DEC prescriptive measures, such as energy recovery for dwelling units.

#### How Does This Apply to Your Project?

Appendix PT provides a compliance option that aligns with the metric used in the Energize Denver 2030 EUI targets. This pathway does not model a baseline for comparison. Instead, it uses the modeled performance of the design only. This can simplify the modeling effort. Learn more about the Energize Denver 2030 EUI targets at <a href="mailto:denvergov.org/energizedenver">denvergov.org/energizedenver</a>.

The Denver Modeling Rules and Procedures include schedules, equipment power densities, procedures to model infiltration and other modeling assumptions that must be used. The model produced using Appendix PT is just for compliance and is not a predictive energy model.

The ASHRAE Building Energy Modeling Professional (BEMP) certification is required for the energy modeler.

#### Why is This Important?

Appendix PT creates an energy compliance pathway that uses EUI (kBtu/sf) as the metric. This aligns with the Building Performance Standard metric for the Energize Denver Ordinance. It also creates a pathway that is the first step to an outcome-based energy code.

#### What is the Climate Impact?

The 2022 Denver Energy Code will reduce operational carbon emissions for commercial new construction by 15% over the 2021 International Energy Conservation Code. Appendix PT does not have any inherent carbon savings, but it promotes electrification and alignment with Energize Denver. Both of these are critical to achieving Denver's climate goals.

