

NEW CONSTRUCTION DECISION TREE

UPDATED JANUARY 2024

Use this tool to quickly identify key decisions, map out options, and communicate clearly the chosen pathways that demonstrate Massachusetts energy code compliance.

HOW TO USE:

1. **START** with the main decision tree, existing or new construction
2. Consider **ONE USE** at a time, answering questions to

- **IDENTIFY** the code "branch"
- Navigate through the appropriate **CODE BRANCH** by establishing the path that represent your project

3. For **MIXED-USE BUILDINGS**, repeat the process for each use group

The branches do not contain all energy code requirements. Instead, it notes options or decisions which send you down a path. The path points to the relevant code section(s), detailing project requirements.

BE MINDFUL:

The International Energy Conservation Code (IECC) is a model energy code, which forms the basis for the Massachusetts energy codes. The first bucket, the **Base Energy Code**, is the minimum required energy code in Massachusetts. The second bucket, the **Stretch Code**, is a **stricter option** towns and cities have already voted to incorporate. The third bucket, the **Specialized Opt-in Code**, includes **additional requirements** in addition to the Base and Stretch Code and is available for municipal vote as of December 2022.

This effort to map out MA Energy Code compliance pathways does not account for impacts of other codes and ordinances that may apply to projects.

#FunFact: The IECC defines a **RESIDENTIAL USE** as detached one-and two family dwellings, townhouses as well as Group R-2, R-3 and R-4 buildings. All other uses are considered Commercial.

#FunFact: To qualify for high ventilation, Permit Drawings must include design for high vent systems (C103.2-16). Buildings without this design use the low ventilation pathway.

#FunFact: Mixed-use buildings can use a combination of code pathways as appropriate for different portions of the building, or choose a whole-building approach through the Passive House pathway.

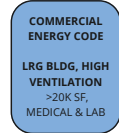
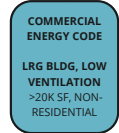
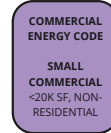
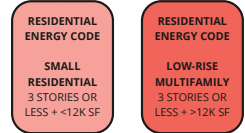
#FunFact: This is the first time tenant interior construction falls under new construction, triggered by the first fit-out.

LOW-RISE (R) RESIDENTIAL ENERGY CODE & USE GROUP

MID/HIGH-RISE (C) COMMERCIAL ENERGY CODE & RESIDENTIAL USE GROUP

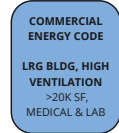
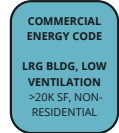
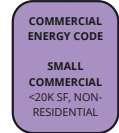
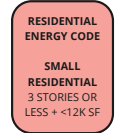
COMMERCIAL ENERGY CODE & USE GROUP

#FunFact: All buildings, in MA Stretch Code communities, including buildings under 100,000 SF are required to follow Stretch Code.



YES, RESIDENTIAL

NO, COMMERCIAL



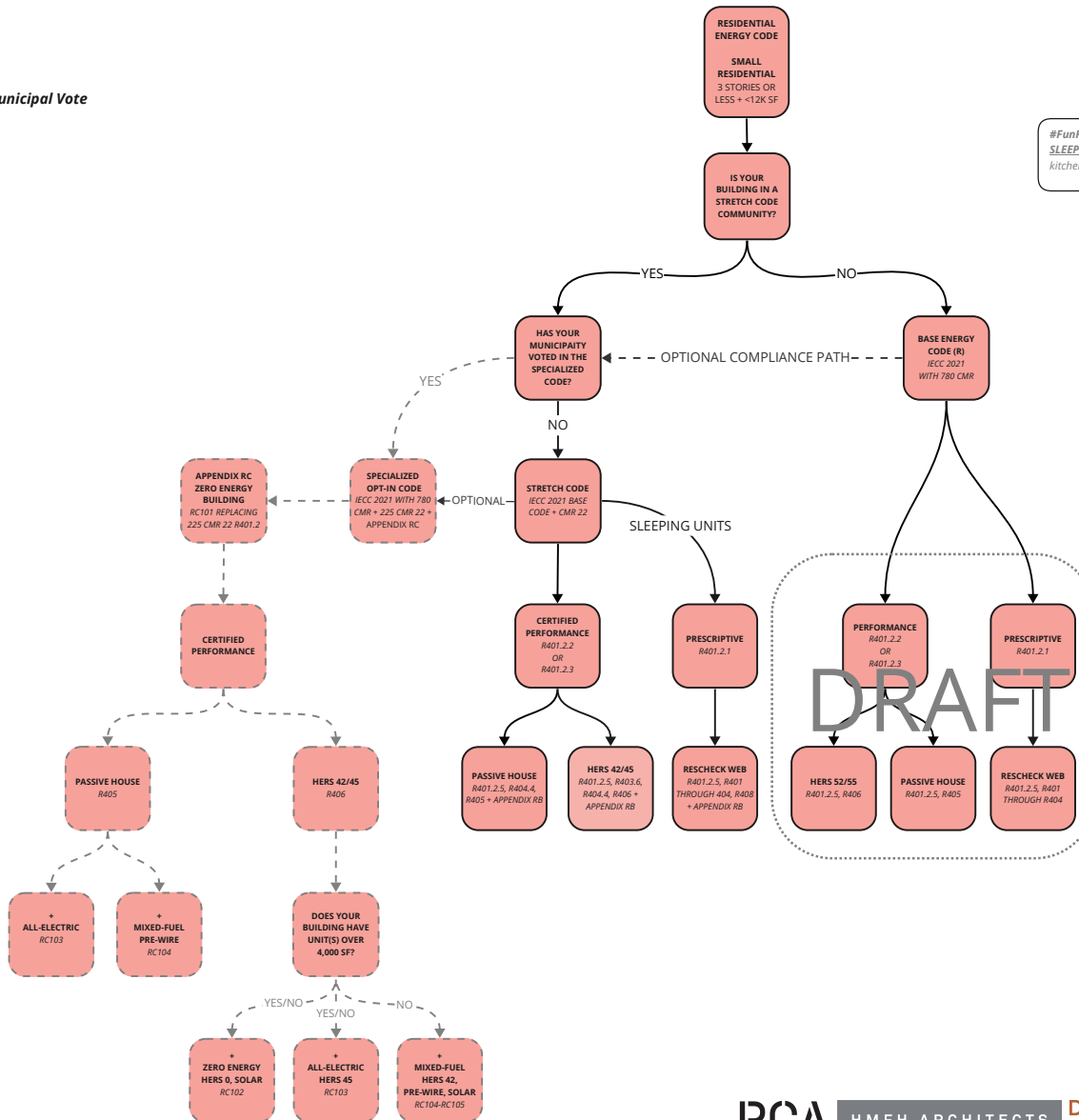
LOW-RISE RESIDENTIAL BRANCH: 3 STORIES OR LESS <12,000 SF

UPDATED JANUARY 2024

LEGEND

→ 2023-2026

- - - → Effective After Municipal Vote



#FunFact: unlike a DWELLING UNIT, a SLEEPING UNIT has either sanitation or kitchen facilities but not both.

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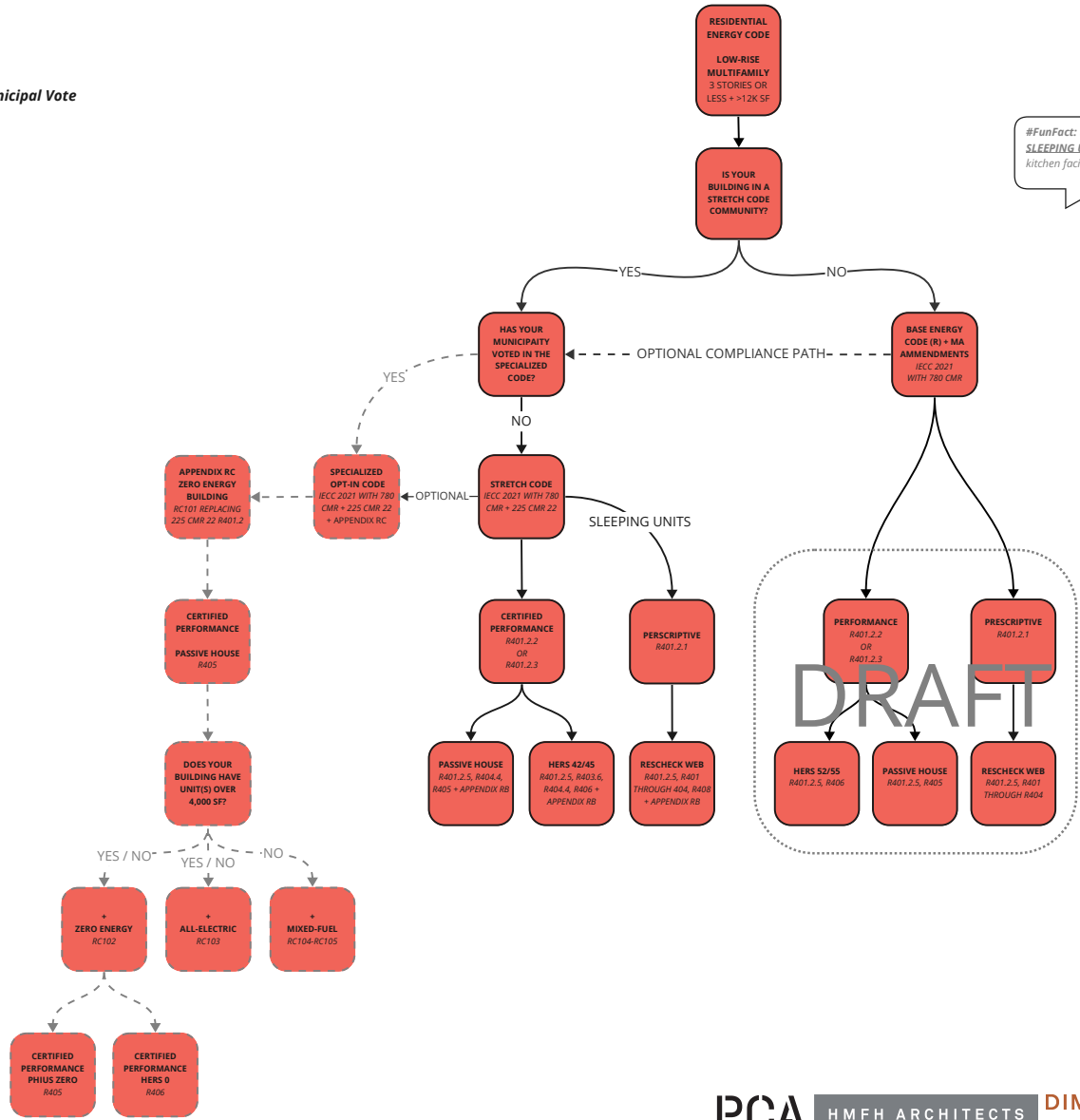
LOW-RISE RESIDENTIAL BRANCH: 3 STORIES OR LESS >12,000 SF

UPDATED JANUARY 2024

LEGEND

- 2023-2026
- - - → Effective After Municipal Vote

#FunFact: unlike a DWELLING UNIT, a SLEEPING UNIT has either sanitation or kitchen facilities but not both.



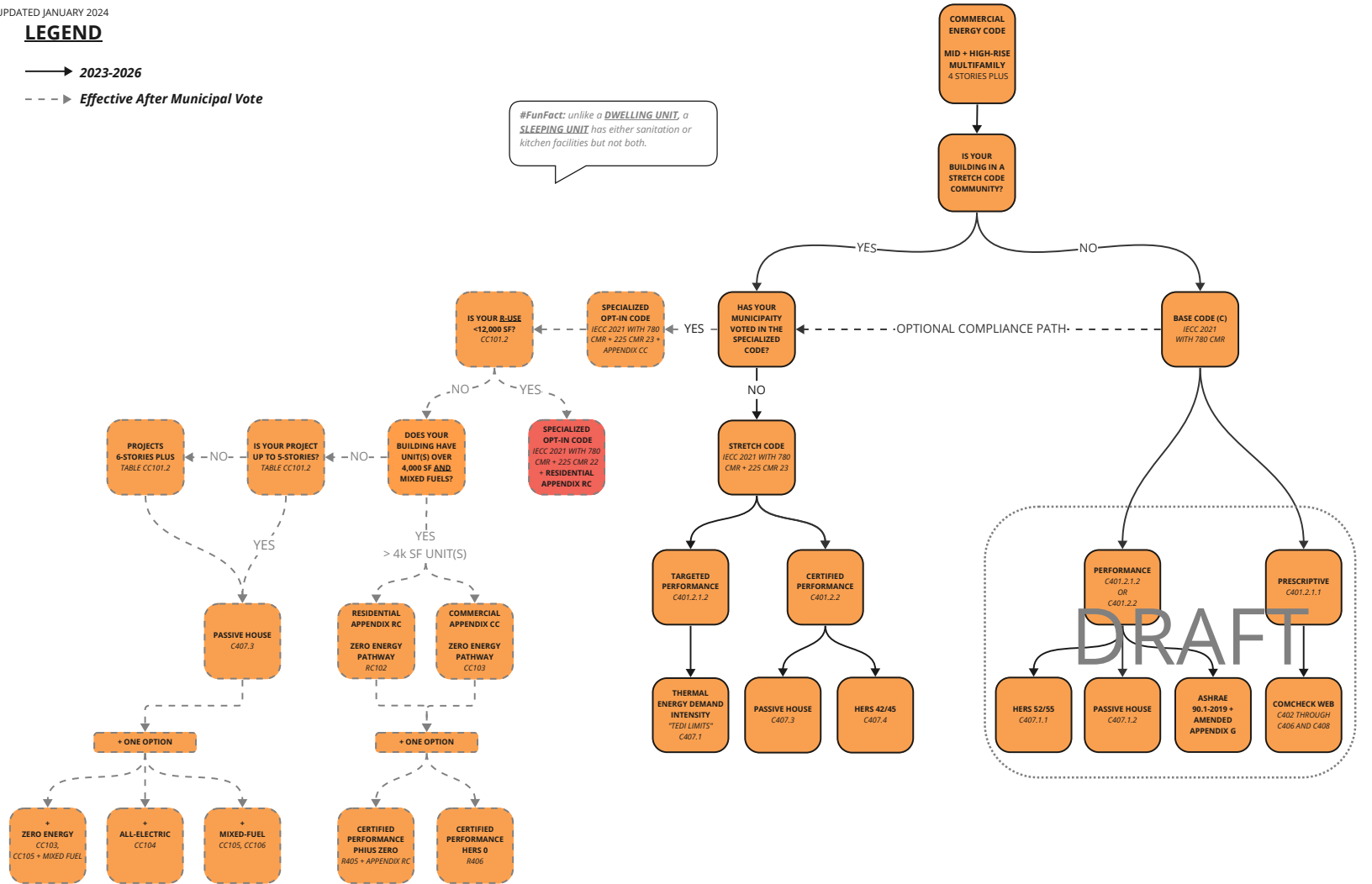
COMMERCIAL BRANCH: RESIDENTIAL 4 STORIES OR MORE

UPDATED JANUARY 2024

LEGEND

- 2023-2026
- - - Effective After Municipal Vote

#FunFact: unlike a DWELLING UNIT, a SLEEPING UNIT has either sanitation or kitchen facilities but not both.



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COMMERCIAL BRANCH: <20,000 SF

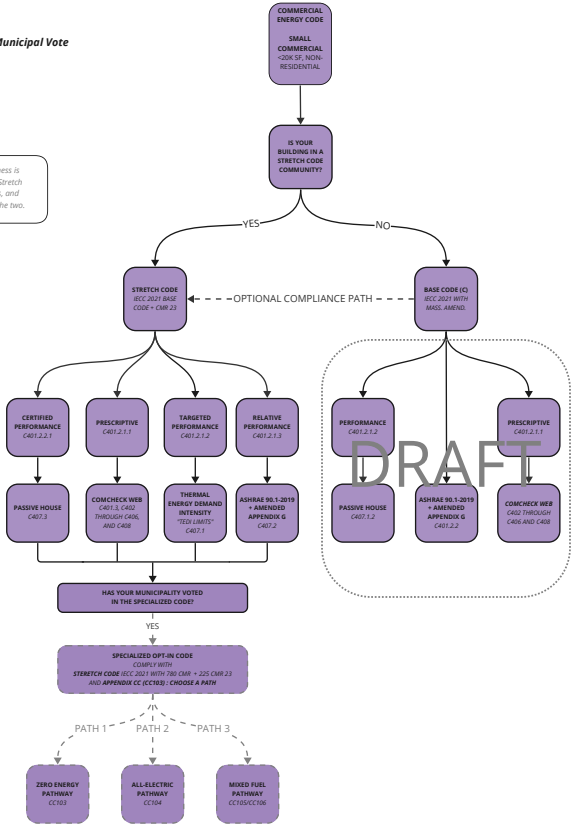
UPDATED JANUARY 2024

LEGEND

→ 2023-2026

- - - Effective After Municipal Vote

#FunFact: EV and PV readiness is required for all paths in the Stretch and Specialized Opt-in Codes, and requirements vary between the two.



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COMMERCIAL BRANCH: LOW-VENTILATION >20,000 SF

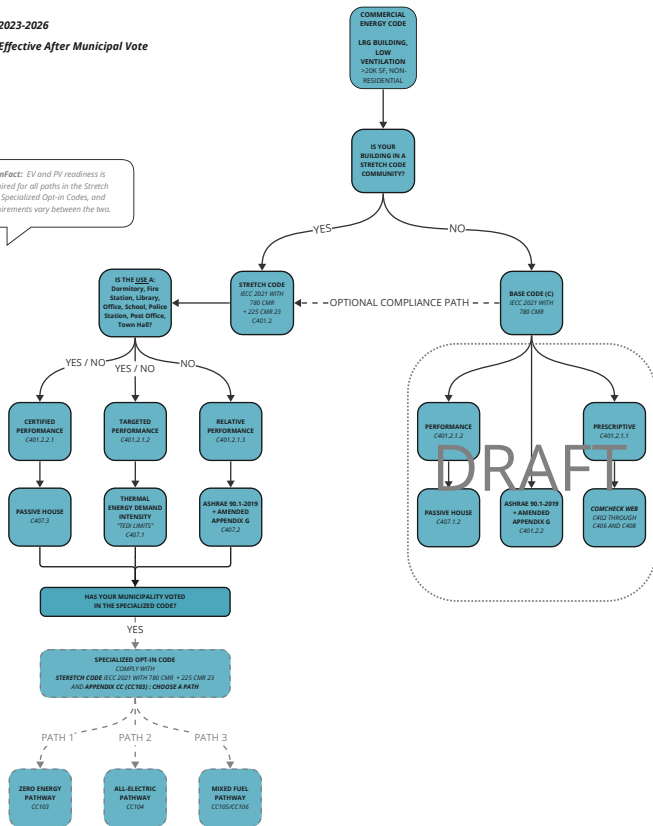
UPDATED JANUARY 2024

LEGEND

→ 2023-2026

- - - > Effective After Municipal Vote

#FunFact: EV and PV readiness is required for all paths in the Stretch and Specialized Opt-in Codes, and requirements vary between the two.



COMMERCIAL BRANCH: HIGH-VENTILATION >20,000 SF

UPDATED JANUARY 2024

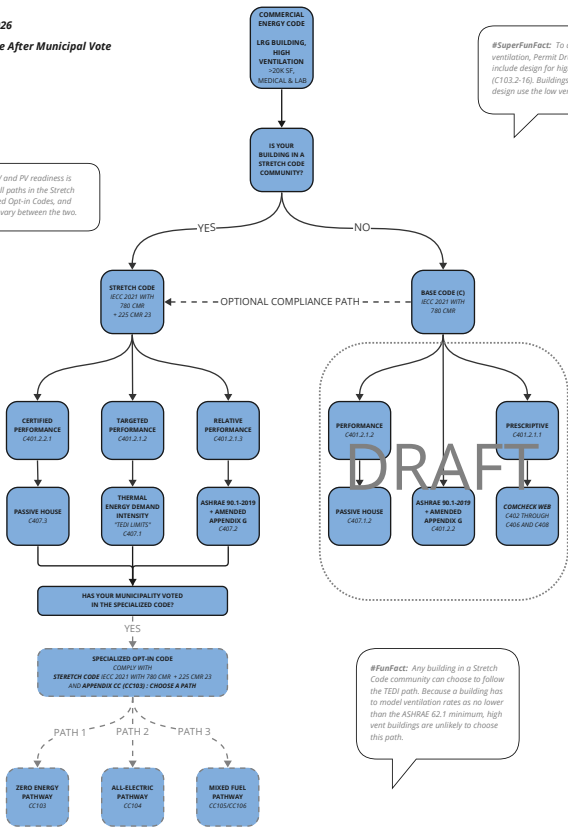
LEGEND

→ 2023-2026

- - - Effective After Municipal Vote

#SuperFunFact: To qualify for high ventilation, Permit Drawings must include design for high vent systems (C10.3.2-16). Buildings without this design use the low ventilation pathway.

#FunFact: EV and PV readiness is required for all paths in the Stretch and Specialized Opt-in Codes, and requirements vary between the two.



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#FunFact: Any building in a Stretch Code community can choose to follow the TEDI path. Because a building has to model ventilation rates as no lower than the ASHRAE 62.1 minimum, high vent buildings are unlikely to choose this path.

EXISTING CONSTRUCTION DECISION TREE

UPDATED JUNE 2023

#FunFact: This is the first time the Stretch Code applies to Existing Alterations, Change of Use, & Additions.

#FunFact: The Specialized Opt-in Code pertains to new buildings only. Reference CMR 23 Section CC101.4 or Section RC101.1.
*This is an important distinction for Low-Rise Residential and Commercial/Multifamily Existing Construction.

#FunFact: Energy code defines a RESIDENTIAL USE as detached one-and two family dwellings, townhouses as well as Group R-2, R-3 and R-4 buildings. All other uses are considered Commercial.

