

# Municipal Opt-In Specialized Building Energy Code (Specialized Code)<sup>1</sup>

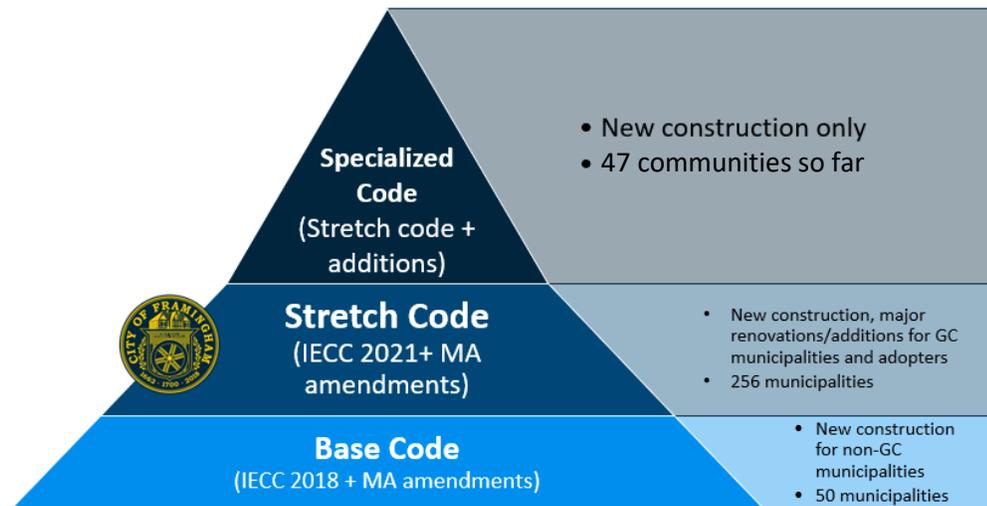
Frequently Asked Questions

[FraminghamMA.gov/SpecializedCode](http://FraminghamMA.gov/SpecializedCode)

## 1. What is a building energy code?

Energy codes set minimum energy requirements for buildings, reducing energy use, energy costs, and greenhouse gas (GHG) emissions over the life of a building. Energy codes are a subset of building codes, which regulate building construction and are issued every three years by the International Code Council in Washington, DC, and adopted by the Commonwealth of Massachusetts alongside state-specific amendments.

## 2. What building energy code options are available in Massachusetts and which code does Framingham currently follow?



Massachusetts cities and towns have 3 related choices of stringency of building energy code that build upon each other.

<sup>1</sup> Adapted from: Northeast Energy Efficiency Partnerships 1.10.23. "FAQ: Updated Stretch Code and Municipal Opt-in Specialized Code, DOER: "Stretch Energy and Municipal Opt-In Specialized Building Code Frequently Asked Questions", Town of Wellesley: "Article 36 Frequently Asked Questions Wellesley Annual Town Meeting 2023", and City of Salem: "Specialized Energy Code".

The minimum or **'Base' Energy Code** is the latest version of the national model code – the International Energy Conservation Code (IECC) with some amendments for Massachusetts. The base code is part of the building codes governed by the state Board of Building Regulations and Standards (BBRS). In 2023, the base code was updated from the 2018 IECC to the 2021 IECC, and MA amendments adding wiring for electric vehicles and maintaining solar ready roof requirements.

The **'Stretch Code'** is a more energy efficient alternative to the base code. The Stretch code increases the energy efficiency requirements for all new residential and commercial buildings, as well as for additions and renovations that require building permits. Municipalities started adopting the Stretch code in 2009; as of October 2024, 254 out of 351 Massachusetts cities and towns have adopted it. The Stretch code is now published and maintained by the Department of Energy Resources with its most recent update in 2023. **Framingham is currently a Stretch Code community.**

The **Specialized Code** is required by statute (MGL 25A Section 6) to help achieve MA GHG emission limits and building sector sub-limits set every five years from 2025 to 2050. As a result, all compliance pathways under the Specialized code are designed to ensure new construction that is consistent with a net-zero Massachusetts economy in 2050, primarily through a combination of energy efficiency, that it in turn enables reduced heating loads, and efficient electrification. Use of fossil fuels such as gas and propane or biomass is permitted but comes with additional requirements for on-site solar generation and pre-wiring for future electrification of any fossil fuel using equipment.

### 3. Why was the Municipal Opt-In Specialized Code created?

The climate bill resulting in [A Next-Generation Roadmap for Massachusetts Climate Policy \(2021\)](#) directed DOER's efforts to revise the Stretch Code to meet emissions reduction limits mandated by the [Global Warming Solutions Act \(2008\)](#), specifically requiring the creation of a municipal opt-in specialized stretch energy code.

#### 4. What are the primary differences between the Stretch Code and the Specialized Code?

The Specialized Code builds on the Stretch Code and only adds requirements to new construction. The Specialized Code is found as an appendix to both the Residential Low-Rise Stretch Energy Code (225 CMR 22.00) and the Commercial Stretch Energy Code (225 CMR 23.00). For residential and commercial applications, core elements of the Specialized Code can be summarized as follows:

- No additional requirements beyond the Stretch Code for all-electric new construction, except for multifamily housing over 12,000 square feet.
- Any new residential or commercial construction using fossil fuel combustion systems, or mixed-fuel buildings, (except multifamily housing over 12,000 square feet) will need to:
  - Provide pre-wiring for future appliance and HVAC electrification.
  - Install a minimum amount of solar (with some exceptions for shading).
  - Homes over 4,000 square feet must install enough solar or other renewables to offset ALL of the home's energy use.
- Any new multifamily housing over 12,000 square feet will need to meet Passive House standards.

Check [FraminghamMA.gov/SpecializedCode](http://FraminghamMA.gov/SpecializedCode) for a table highlighting the differences between the Stretch Code and the Specialized Code.

#### 5. What is a “mixed-fuel building” under the Opt-in Code?

A “mixed-fuel building” includes some form of combustion, such as for heating or cooking. A “mixed-fuel” building is not all-electric.

#### 6. Is it possible to install a gas cooktop, water heater, or other appliance along with all-electric heating and cooling?

Yes, but this would be a mixed-fuel building and must meet the mixed-fuel requirements including installation of electrical service and wiring

for eventual conversion of those gas appliances to electric. All-electric buildings allow fossil fuels for emergency backup generation systems.

**7. Does the Specialized Code apply to renovations, additions, or alterations of my home or business?**

The Specialized Code applies only to new construction and has no requirements above the Stretch Code for renovations, additions, or alterations. Additions and renovations, depending on size, are regulated by the Stretch Code and Base Energy Code.

**8. How many communities have adopted the Specialized Code?**

47 communities have adopted the Specialized Code since its development in 2022 including communities such as Natick, Needham, Hopkinton, Ashland, Sherborn, and Worcester.

**9. What is a Passive House?**

Passive House is a performance-based building certification that focuses on the dramatic reduction of energy use for space heating and cooling. A Passive House can be any building – a school, an apartment building, a new residential home or a historical renovation, even a large office skyscraper.

**10. Will the Municipal Opt-In-Specialized Code discourage the creation of affordable housing?**

No, because financial incentives through Mass Save and competitive incentives from the Department of Housing and Community Development make this attractive. All-Electric buildings entail marginal additional construction costs. Third-party power purchase agreements provide solar energy with no upfront cost. The result is affordable and resilient housing that delivers comfort and efficiency, providing affordable housing residents with improved indoor air quality and lower energy bills over time.

**11. Why does the Specialized Code require pre-wiring if a building is mixed-fuel?**

The Specialized Code was developed to be consistent with a net-zero economy in the Commonwealth by 2050. If a building is constructed with fossil fuel equipment, pre-wiring at the time of construction will enable electrification in the future while avoiding the increased cost, disruption, and complexity of future building retrofits that would otherwise be needed to meet the Commonwealth's climate goals.

**12. How would Framingham adopt the Specialized Code?**

Framingham would adopt the Specialized Code through a vote of the City Council and approval by the Mayor.

**13. How does building electrification support emissions reductions?**

An electric heat pump today has 45% lower emissions than natural gas heating. However, that's just today –it is anticipated that the emissions of heat pumps will be almost 90% less than natural gas as the electric grid continues to grow cleaner over time with the addition of more renewable energy from sources such as solar and wind. With the flexibility of electricity generation to draw from more sustainable fuel sources over time, all-electric buildings are best positioned to achieve long-term goals of reaching net zero emissions.

**14. Does the Specialized Code require additional EV charging station wiring requirements?**

No, the Specialized Code would not impact EV charging station wiring requirements over what is required by the Stretch Code. Currently, the Stretch Code requires EV wiring for 20% of the spaces for businesses and multifamily buildings (up from 10% required in the base code) and one space per new residential home.