

## **Stretch Energy Code - Frequently Asked Questions**

*provided by Town of Princeton Environmental Action Committee (EAC)*

**What is Princeton's current energy code?** Building construction in Princeton currently has to meet the Base Energy Code of the Massachusetts State Building Code, which sets standards that all building projects must follow regarding the building's energy consumption.

**Why is the EAC recommending adoption of the Stretch Energy Code?**

- To ensure that newly constructed buildings in Princeton are more energy efficient.
- To meet one of the five criteria necessary for Princeton to achieve Green Community designation status, which would make Princeton eligible for an initial estimated grant of \$130,000 and then competitive grants of up to \$200,000 annually to fund projects that will improve energy efficiency and save the Town money in operating costs

**How do the Base and Stretch Energy Codes currently differ?** The *Base Energy Code* currently provides two options builders may use to meet energy efficiency requirements:

- **Prescriptive Method**-- installing elements with specific energy efficiency levels (e.g., windows, or wall and roof insulation, furnace, etc.), or
- **Performance-based Method**-- building to ensure the home performs to a specific level of efficiency, measured through a HERS (Home Energy Rating System) analysis both pre- and post-construction. The builder designs how that target is reached.

The *Stretch Energy Code* provides guidance for *new* construction that is more energy efficient than the Base Energy Code. It simply requires that builders use the **performance-based method** and meet a HERS rating of 55. This method gives flexibility in construction while ensuring the home is performing as expected.

**What is the HERS rating, and what does a HERS 55 rating mean?** The HERS rating is a measure based on a home's total expected energy use and overall efficiency, calculated by a certified HERS rater. Building to a HERS rating ensures a new home performs as designed by testing for air leakage and inspecting insulation installation. A home built to a HERS 55 is about 7% more energy efficient than a "reference" home built to today's Base Energy Code.

**Does the Stretch Energy Code apply to renovations, repairs, alterations, or additions to existing homes or commercial buildings?** No. The current Stretch Energy Code only applies to new residential construction and to new large\* commercial construction.

(\*Greater than 100,000 sq. ft. or 40,000 sq. feet for energy intense uses like laboratories or grocery stores.)

**How much will the Stretch Energy Code add to the cost of new construction?** This will vary, but the Massachusetts Department of Energy Resources (DOER) estimates that building a 2,550 square foot home to the Stretch Energy Code adds about \$2,000 to the price of construction, which is about 0.5% of the total cost —or about \$0.78 per square foot.

**How much will the Stretch Energy Code save the new construction homeowner in energy costs?** According to DOER, energy cost savings generally range from \$260 to \$650 each year depending on the heat source. This means that most new construction homeowners could recover any Stretch Energy Code-related initial construction costs within about four years.

**Are Princeton builders familiar with the Stretch Energy Code?** Nearly 80% of Massachusetts communities have adopted the Stretch Energy Code, including our neighbors in Rutland, Westminster, Hubbardston, Leominster, and West Boylston. Builder training on the Stretch Energy Code is readily available.

**If the Stretch Energy Code is amended in the future, does Princeton have to accept the amendments?** Yes. Princeton's adoption of a Stretch Energy Code Bylaw incorporates the Stretch Energy Code, including any future additions, amendments or modifications to the Stretch Energy Code. A minor update with minimal changes to the Stretch Energy Code is expected in August 2020.\* The next substantial update to the Stretch Energy Code is anticipated to be effective January 2022.  
 \*Clarifies 4-story multi-family homes will have to follow HERS path; increases HERS from 55 to 60 for new homes heated with heat pumps.

**If Princeton adopts the Stretch Energy Code, does the Town need to follow this permanently?** No. The Town can revoke the adoption of the Stretch Energy Code at any time through a vote at Town Meeting and default back to the Base Energy Code. If that happened, the Town would lose Green Community designation status, but would not have to repay any Green Community grant funds received while a designated Green Community.

**What Town resources will be required to implement the Stretch Energy Code?** No additional Town resources are needed to implement the Stretch Energy Code.

