## Stretch Energy Code Article #23

Massachusetts gives communities two options for their building energy code – a base energy code or an optional stretch energy code. Towns can choose to adopt the stretch energy code by Town Meeting vote, and it can be rescinded by Town Meeting vote. Becoming a Green Community requires that Town Meeting adopt the Stretch Code.

On January 1, 2017, both the Base Energy Code as well as the Stretch Energy Code was updated. The difference between the two is now much smaller than in the past. Basically, new residential construction in a Stretch Code town needs to follow the Performance Path of the Base code rather than the Prescriptive Path. The updated Stretch Code applies to all new commercial buildings over 100,000 square feet and new commercial buildings over 40,000 square feet if they are specific high energy users such as Supermarkets, Laboratory buildings, Refrigerated warehouses. It is worth noting that all additions, renovations, and repairs to residential buildings are explicitly exempted from the updated Stretch Code. Also smaller new commercial buildings as well as additions, renovations and repairs of commercial buildings are exempt

A key feature of the Stretch Energy Code is that it is performance based. It requires new homes to meet a HERS (Home Energy Rating System) index rating target, rather than requiring the installation of specific levels of energy efficiency for each building element (e.g. Windows, Wall insulation, roof insulation, furnace etc.). The HERS rating is a measure based on a home's total expected energy use and overall efficiency. It is calculated by a certified HERS rater using accredited software, which uses information on the design of the energy systems in a home to calculate the annual energy needs of the home and give it a rating score.

One benefit of using HERS ratings for compliance with the Stretch Energy Code is that builders do not have to install specific energy efficiency measures, rather they have the flexibility to choose which energy efficiency measures to install, and how to design the home in order to meet the HERS rating target. It is also a way to ensure that homes are well built. As part of the HERS rating, the HERS rater tests the home for air leakage and inspects insulation installation, which helps ensure that the home performs as designed.

Basically, it requires that the performance path of the standard building code be followed in Stretch Code municipalities for new homes and for large new commercial buildings. Under the Stretch Code, the additional cost will be primarily for the services of the HERS Rater and more efficient heating systems. This is generally in the \$1,600 - \$3,000 range for residences with a \$1,300 - \$1,700 incentive available through the Mass Save Residential New Construction Program that mostly offsets the cost. There are also typically annual energy bill savings that more than tip the balance to give homeowners a net savings every year.

Once adopted, the stretch energy code would take effect on January 1, 2020. Currently 265 communities, representing more than seventy percent of the state's population, have adopted the Stretch Energy Code. Nearby communities that have adopted it include Athol, Barre, Gardner, Leominster, Petersham, Rutland, Templeton, Westminster and Winchendon. Most builders in the area are likely familiar with the stretch energy code. Many say that the trade-off feature of the Stretch Code makes it easier to build to than the standard building code.

## Hubbardston's estimated grant amount is \$130,000 Neighboring Green Communities have received:

Community	Year Designated Green Community	Total Grants Received
Barre	2011	\$ 293,094
Gardner	2010	\$ 301,357
Rutland	2018	\$ 145,622
Westminster	2012	\$ 141,500

