THE STRETCH ENERGY CODE

(8th EDITION, 780 CMR, Appendix 115.AA – formally 7TH EDITION CODE, APPENDIX 120.AA)

FREQUENTLY ASKED QUESTIONS (FAOs)

(1) Q: What is 780 CMR, Appendix 115.AA (the "Stretch Energy Code")?

A: The Stretch Energy Code is an appendix to the 8th Edition, Massachusetts State Building Code which creates a higher tier of Energy Conservation. It is available to municipalities that choose to adopt it should they seek building energy conservation provisions more progressive than the baseline energy conservation requirements of the Massachusetts State Building Code.

(2) Q: How advanced is the Stretch Energy Code over State Building Code baseline energy conservation requirements?

A: Buildings designed and constructed to the Stretch Energy Code are roughly 20% more energy efficient than buildings designed and constructed to 780 CMR baseline energy conservation requirements. This figure will vary on a building by building basis.

(3) Q: What types of buildings are impacted by requirements of the "Stretch Energy Code"?

A: The Stretch Energy Code, if adopted by a municipality, affects the design and construction of: (a) new residential buildings of 3 stories or less; (b) portions of existing residential buildings undergoing renovation or addition; (c) certain new commercial buildings.

Commercial buildings smaller than 5,000 sq. ft., existing commercial building renovations, and "specialty" buildings – supermarkets, laboratories, and warehouses – below 40,000 sq. ft., are exempt from Stretch Energy Code requirements but not from 780 CMR baseline energy conservation code requirements.

(4) Q: Who can adopt or rescind the "Stretch Energy Code" and by what adoption or rescission mechanism?

A: Municipalities may choose to adopt the Stretch Energy Code via the manner prescribed by law and rescind in the same manner it was adopted. While towns are encouraged to adopt the Stretch Energy Code through a vote of Town Meeting, and

cities are encouraged to adopt through their City Manager/City Council/Board of Aldermen or Mayor/City Council/Board of Aldermen process, specific questions regarding the adoption method should be directed to city/town counsel. A sample Article is provided as guidance:

ARTICLE: To see if the Town will vote to enact Chapter ___ of the Town of ____ General Bylaws, entitled "Stretch Energy Code" for the purpose of regulating the design and construction of buildings for the effective use of energy and pursuant to Appendix 115.AA of the Massachusetts Building Code, 780 CMR, the Stretch Energy Code, **including amendments or modifications thereto**, a copy of which is on file with the Town Clerk, or take any other action relative thereto.

or

ARTICLE: To see if the Town will vote to accept Appendix 115.AA of the Massachusetts Building Code, 780 CMR, the "Stretch Energy Code", **including amendments or modifications thereto,** regulating the design and construction of buildings for the effective use of energy, a copy of which is on file with the Town Clerk, or take any other action relative thereto.

(5) Q: If a municipality adopts the Stretch Energy Code, who locally enforces its requirements? Where does one appeal requirements of the Stretch Energy Code?

A: The Stretch Energy Code is part of 780 CMR; therefore, it is enforced at the local level by the municipal building official. All appeals from the requirements of the Stretch Energy Code must be made to a Building Code Appeals Board – typically the State Building Code Appeals Board (not a zoning board of appeal.)

(6) Q: Are there any restrictions/stipulations impacting a municipality's decision to adopt the "Stretch Energy Code?

A: Yes, these are as follows: **(a)** the municipality can only implement the Stretch Energy Code commencing on the first day of January <u>or</u> the first day of July in any given year; **(b)** during the first 6 months after adoption, the Regulated Community in such cities and towns may choose between the existing baseline energy conservation code requirements of the Building Code <u>or</u> the Stretch Energy Code requirements. After this 6 month period has passed, however, the requirements of the Stretch Energy Code govern; **(c)** the Stretch Energy Code provisions cannot be enforced until municipal building officials have received training in the requirements of the Stretch Energy Code (<u>see No. 7</u> below for more details); **(d)** the Stretch Energy Code can only be adopted in whole – not in part. For example, if a municipality desires to adopt the Stretch Energy

Code, it must adopt <u>both</u> the residential and commercial portions, and cannot further restrict the application of the Stretch Energy Code to only certain building types or sizes.

(7) **Q:** What are the training requirements for municipal building officials?

A. By statute and Board of Building Regulations and Standards (BBRS) policy, in order for a municipality to enforce the Stretch Energy Code, building officials must first be trained in the requirements of the Stretch Energy Code. The BBRS has already approved an earlier 2010 Training that was completed by many Building Officials and communities should verify that their Building Officials have been so trained or reach out for training.

(8)Q: Can the BBRS amend Appendix 115.AA (the Stretch Energy Code")?

A: Yes – since 780 CMR 115.AA is like any other regulation in the Building Code, it is subject to possible amendment by the BBRS via the Building Code amendment process.

(9)Q: If the BBRS amends a particular Edition of the Stretch Energy Code, what is the impact on communities that have already adopted the earlier version of the same Stretch Energy Code Edition?

A: Generally, none. The amendments become effective upon promulgation and the municipality is obligated to incorporate amendment updates promulgated by the BBRS. In order to ensure that this is clear, it is suggested that municipalities use the model Article language provided in Question 4, above, ("...including amendments or modifications thereto..."). It should be noted that municipalities are free to rescind the Stretch Energy Code (as a whole) at any time if the amendments are problematic to the community. If this is done, the baseline code requirements will apply.

(10)Q: If the BBRS adopts a new edition of the State Building code (including a new edition of the Stretch Energy Code) what does a municipality have to do to continue to enforce the Stretch Energy Code?

A: Similar to Answer 9, above when the BBRS adopts a new edition of the State Building Code, including the Stretch Energy Code, the new edition is effective upon promulgation, and the municipality is bound by the language in the new edition. If this is problematic for the community, it may rescind the Stretch Energy Code (as a whole) and the baseline code requirements will apply.

_(11) For new construction low rise residential buildings (3 stories or less), the Stretch Energy Code requires a "HERS" Index Rating of the building. What is a "HERS" Index Rating?

A: The term "HERS" stands for *Home Energy Rating System.* The HERS index scores a home on a scale from 0-100 where 0 is a zero-net-energy home, and 100 is a code compliant new home (currently based on the IECC 2006 code). The HERS index has been in use for many years by "beyond code programs" such as Energy Star Homes, and LEED for Homes, and by the Federal IRS for tax credits and energy efficient mortgages. HERS index ratings are performed by an independent HERS rater, working with the home builder, and then submitted to the local building code official. The Stretch Energy Code requires a HERS index of 65 or less for new homes of 3,000 square feet or above, and 70 or less for new homes below 3,000 square feet (this includes multi-family units in buildings of 3 stories or less). A HERS index of 65 means that the home is estimated to use 65% as much energy as the same home built to the 2006 International Energy Conservation Code, or a 35% annual energy savings.

(12) What is a HERS Rater and who certifies such person?

A: HERS Raters are individuals that have been certified in accordance with requirements set forth by Residential Energy Services Network (RESNET® - In April 1995, the National Association of State Energy Officials and Energy Rated Homes of America founded the Residential Energy Services Network (RESNET) to develop a national market for home energy rating systems and energy efficient mortgages).

A certified home energy rater (HERS Rater) must successfully complete training by a RESNET Accredited Rater Training Provider and must be certified by a RESNET Accredited Rating Provider.

Information regarding RENET, HERS Index rating, HERS Raters, appeal of a HERS Rater, etc., can be found on the web at: www.natresnet.org

(13) How do I locate a certified HERS Rater?

A: RESNET maintains a web site where one can locate a certified Rater. Again by going to: www.natresnet.org and then selecting "Find a Certified Rater" or going directly to: www.natresnet.org/directory/raters.aspx one can locate a Certified HERS Rater.

(14) Q: Section 104.1 of the Stretch Energy Code provides that work for which a permit is required shall be subject to inspection by the building code official or an "approved inspection agency". Who makes this determination?

A: The building official is authorized to accept reports of approved inspection agencies in accordance with 780 CMR, similar to a structural engineer's report. The building

official, however, may not dictate who/what that inspection agency is, so long as such individuals / inspection agencies satisfy requirements of 780 CMR.

(15) Q: If building officials are trained and certified as certified HERS Raters, may building officials choose to perform the HERS Rating for buildings within or outside of their jurisdictions?

A: Questions regarding a possible conflict of interest under MGL c. 268A should be addressed to the State Ethics Commission.

(16) Q: Since 780 CMR requires a certified HERS Rater to rate the subject building, are building officials still allowed to be on site observing/inspecting energy coderelated construction?

A: Yes – Although a certified HERS Rater is required to rate the building, the building official, by statute, enforces the requirements of 780 CMR and is always allowed to view /inspect any building permittable construction.

(17) Q: May a building official not accept a report submitted by a third party HERS Rater?

A: Yes, if a report submitted by a third party HERS rater is not done in accordance with the requirements of 780 CMR. In this case, the building official is required to cite the section of code that has been violated as the reason for non-acceptance.

(18) Q: Under Section 104.5, is a building official authorized to require submittal of additional reports, documentation, etc. to support the results of a HERS rating report? (e.g., calibration reports for blower door equipment, etc.).

A: Yes, as deemed necessary by the building official in accordance with 780 CMR.