



May 31, 2016

Members, Board of Building Regulations and Standards

Submitted via email to felix.zemel@state.ma.us

Dear BBRS Board Members,

Thank you for the opportunity to comment on the draft stretch code. We sent a letter to Energy and Environment Secretary Matthew Beaton in October 2015, expressing our concern that the stretch code was not ambitious enough in terms of energy efficiency gains. We pointed out in particular:

- Commercial stretch code exempts buildings smaller than 100,000 square feet and only applies to new buildings, effectively excluding much of the commercial construction;
- Residential code simply makes the voluntary 2015 IECC base code option of scoring a 55 or less on the HERS Index mandatory, so homes already using this option would not see any additional requirements.

Now that the formal comment period has opened, we wanted to take this opportunity to offer additional feedback.

STRETCH ENERGY CODE PROPOSED UPDATE – TECHNICAL GUIDELINES

Upon the likely adoption of the ninth edition of the State Building Code this year, Massachusetts will be seven years and two building energy code cycles removed from its initial Stretch Code. While the base energy code of the proposed ninth edition is very strong, the Stretch Code does not "stretch" very far beyond it, which defies its very definition and purpose. Below we lay out the shortcomings of the proposed stretch code and suggested improvements to retain the spirit and intent of the stretch code in the forthcoming ninth edition.

SHORTCOMINGS OF THE PROPOSED STRETCH ENERGY CODE UPDATE

1. **Zero Requirements for All Existing Buildings**. There are zero requirements beyond what is included in the base energy code for renovations, remodels, or any other kind of alterations to existing buildings, which comprise the vast majority of available energy savings opportunities.

- 2. Zero Requirements for All New Small and Medium Commercial Buildings. Only buildings 100,000 square feet or larger have to comply with the requirement of modeled efficiency 10% beyond the level set by ASHRAE Standard 90.1-2013.
- 3. Zero Requirements for Some New Residential Buildings. There are no additional requirements for homes which are already using the Section R406 pathway option (HERS, Energy Star v3.1, or Passive House) to comply with the base energy code.

SUGGESTED IMPROVEMENTS TO REMEDY THESE SHORTCOMINGS

- 1. Set Simple Requirements for Existing Buildings. Alterations of existing commercial buildings 5,000 sq. ft. or larger could be required to comply with one of the additional efficiency packages options in Section C406 within the space affected by the alteration unless petitioned and deemed impractical by the authority having jurisdiction. Existing homes could be required to achieve a HERS rating of 75 or lower, which is a modest improvement from the current stretch code's 80/85 requirement based on the home's floor area.
- 2. Set Reduced Efficiency Targets for New Small and Medium Commercial Buildings. An efficiency level of 5% beyond ASHRAE 90.1-2013 could be required for buildings smaller than 100,000 sq. ft. but larger than 10,000 sq. ft. Alternatively, the threshold for compliance with the proposed 10% requirement could be lowered to 50,000 sq. ft.
- 3. **Set Requirements for All New Residential Buildings**. Homes using the HERS option of Section R406 to demonstrate compliance with the base energy code could be required to achieve the threshold for compliance by efficiency alone (that is, achieve a HERS Index of 55 or lower before factoring in credits from renewable/alternative energy).
- 4. Recapture Any Renewable Energy Provisions Eliminated from Base Code. Solar and electric vehicle readiness provisions have been proposed for both residential and commercial in the state's base energy code update, and we strongly support those. If, however, any of these provisions are eliminated after the public comment and final review processes, they could be incorporated into the stretch energy code.

Thank you for taking our comments into consideration.

Sincerely,

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Keith Burrows, Chair, Greater Boston Group Executive Committee, MA Sierra Club
Josh Craft, Program Director, Environmental League of Massachusetts
Eugenia Gibbons, Clean Energy Program Director, Mass Energy Consumers Alliance
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