780 CMR: MASSACHUSETTS AMENDMENTS TO THE *INTERNATIONAL BUILDING CODE 2009*

CHAPTER 13: ENERGY EFFICIENCY

1301.1.1 Replace section:

1301.1.1 Criteria. Buildings shall be designed and constructed in accordance with the *International Energy Conservation Code 2012* (IECC) with Massachusetts amendments as follows:

C402.2.6 Delete the exception.

C406.4 Add subsection:

3. For onsite use of biomass fuel, provide not less than 65 percent of the energy used within the building for space and service water heating using sealed combustion mechanical equipment rated at a minimum of 85 AFUE. The biomass shall meet the eligible fuel and emission criteria under M.G.L. c. 25A, §11F (Massachusetts renewable energy portfolio standard).

C407.6.1.1 Add subsection:

C407.6.1.1 Approved Calculation Software Tools. Software tools meeting the requirements of subsection C407.6 are:

1. **COMcheck**: Version 3.9.2 or later found at http://www.energycodes.gov/
2. **REM/Rate** or other **RESNET** accredited software may be used for *residential buildings* up to 5 *stories above grade plane*, and with independent unit-level heating and cooling systems, where the residential use constitutes no less than 50% of the total building *conditioned space*. All other spaces must comply with IECC Chapter 4 (CE).

C407.7 Add subsections:

C407.7 Approved Alternative Energy Performance Methods. The requirements of this section are *approved* performance methods to demonstrate compliance to section C407 without calculation of a standard reference design.

1. **RESNET Approved Software for the Home Energy Rating System (HERS).** For residential units within a building up to 5 stories above grade, and with independent unit-level heating and cooling systems, where residential uses constitute no less than 50% of the total building conditioned space, a HERS rater verified index of 65 or less for the finished units together with a completed and HERS rater verified ENERGY STAR Thermal Enclosure Checklist may be used. Compliance with this section requires that the criteria of Sections C402.4, C403.2, C404 and C405 are met.
2. **Passive House Institute US (PHIUS) Approved Software: Passive House Planning Package (PHPP).** Where the Specific Space Heat Demand as modeled in Passive House Planning Package (PHPP) by a Certified Passive House Consultant is less than or equal to 16 KBtu/sq ft/year. Compliance with this section requires that the criteria of Sections C402.4, C403.2, C404 and C405 are met.

C407.7.1 Documentation. The following documentation is required for energy code compliance under subsection 407.7:

1. For HERS compliance, a compliance report which includes a proposed HERS index of 65 or lower, a description of the unit's energy features, and a statement that the rating index is "based on plans" will be required for issuance of a building *permit*. A copy of the final certificate indicating that the HERS rating index for each unit is verified to be 65 or less with a completed HERS rater verified ENERGY STAR Thermal Enclosure Checklist is to be submitted to the *building official* before the certificate of occupancy is issued. The HERS rating compliance shall be determined before electrical renewable energy systems are credited.

A certificate as required in Section R401.3 is required for each unit, and will list the HERS index rating of the *dwelling unit*.

13.00: continued

2. For Passive House Planning Package (PHPP) verified compliance, a list of compliance features, and a statement that the estimated Specific Space Heat Demand is "based on plans" will be required for issuance of a building *permit*. A copy of the final PHPP report indicating the finished building achieves a Certified Passive House Consultant-verified Specific Space Heat Demand of less than or equal to 16 KBtus/sq ft/year shall be submitted to the *building official* before the certificate of occupancy is issued. The interior design temperatures used for heating and cooling load calculations shall be a maximum of 72°F (22°C) for heating and minimum of 74°F (23°C) for cooling.

(PAGES 73 AND 74 ARE RESERVED FOR FUTURE USE.)