

## CHAPTER 13 – GENERAL MECHANICAL SYSTEMS - AMENDMENTS

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The ninth edition building code became first effective on October 20, 2017 and, with a shortened concurrency period, the new code came into full force and effect on **January 1, 2018**.

The new, ninth edition code is based on modified versions of the following *2015 International Codes as published by the International Code Council (ICC)*.

- The International Building Code (IBC);
- International Residential Code (IRC);
- International Existing Building Code (IEBC);
- International Mechanical Code (IMC);
- International Energy Conservation Code (IECC);
- International Swimming Pool and Spa Code (ISPSC);
- Portions of the International Fire Code (IFC).

Massachusetts amends these code fairly significantly to accommodate for unique issues in the commonwealth. This package of amendments revises the IRC only. Please see base code amendments for changes to other listed codes that comprise the ninth edition.

Please remember that the Massachusetts amendments posted on-line are **unofficial versions** and are meant for convenience only. Official versions of the Massachusetts amendments may be purchased from the State House Bookstore @ [Shop the Bookstore](#) and any of the I-Codes may be purchased from the International Code Council (ICC) @ [iccsafe.org](http://iccsafe.org).

Additionally, the ICC publishes transition documents that identify changes from the 2009 to the 2015 I-Codes for those who may have interest.

- [International Building Code \(IBC\) Transition](#)
- [International Residential Code \(IRC\) Transition](#).

**Note:** *The residential code is part of the overall building code, which is referred to as 780 CMR. It is considered to be Chapter 51 in the overall code, which is why you will see reference to 780 CMR Chapter 51 in the amendments. The residential code is applicable to detached one- and two-family dwellings, multiple-family dwellings (townhouses) not more than three stories in height above the grade plane and/or their accessory structures not more than three stories in height above grade. See the base code for other building types.*

51.00: continued

**Table N1106.4.1 (R406.4.1). Maximum HERS Ratings with Onsite Renewable Energy Systems**

Renewable Energy Source	Maximum HERS index score *	
	New construction	Whole house renovations; additions
None	55	65
Solar PV > 2.5kW; Renewable primary heating system	60	70
Solar PV; Renewable primary heating and solar thermal DHW	62	72
Solar PV & Renewable primary heating and solar thermal DHW	67	77

\*Maximum HERS rating prior to onsite electric renewable generation in accordance with section N1106.4 (R406.4).

**N1106.5 (R406.5)** Revise the section as follows:

**N1106.5 (R406.5) Verification by Approved Agency.** Verification of compliance with section N1106 shall be completed by an approved third party. For compliance using a HERS rating or Energy Star Homes 3.1 certification, verification of compliance shall be completed by the certified HERS rater. For compliance using PHIUS+ 2015 or PHI software, verification of compliance shall be completed by a certified passive house consultant.

**N1108.1.2 (R502.1.2)** Add an exception to the subsection as follows:

**Exception:** Alternatively, the addition and any alterations that are part of the project shall comply with N1106 (R406) and shall achieve a maximum HERS index using Table N1106.4.1 (R406.4.1).

## **Chapter 12: MECHANICAL ADMINISTRATION**

**M1201.1** Revise the section as follows:

**M1201.1 Scope.** The provisions of Chapters 12 through 23 of 780 CMR 51.00 shall regulate the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and used to control environmental conditions within buildings. These chapters shall also regulate those mechanical systems, system components, equipment and appliances specifically addressed in this code.

For the provisions of Chapters 12 through 23 of 780 CMR 51.00 governed by the specialized codes (see 780 CMR 1.00: *Scope and Administration (Unique to Massachusetts)*), see the applicable specialized codes. Provisions related to work otherwise governed by 780 CMR 51.00 shall be retained if not in conflict with other sections of 780 CMR 51.00. Enforcement of work governed by the specialized codes shall be by those persons so authorized.

Additional requirements for boilers and other pressure vessels may be found in M.G.L. c. 146 and 522 CMR: *Board of Boiler Rules*, as applicable.

## **Chapter 13: GENERAL MECHANICAL SYSTEM REQUIREMENTS**

**M1303.2** Add the section as follows:

**M1303.2 Solid Fuel-burning Central Heating Appliance Labeling.** Solid fuel-burning boilers or warm air furnaces shall bear a permanent and legible factory-applied label supplied to the manufacturer and controlled by an approved testing agency; such label shall contain applicable items in section M1303.1 and the following information:

- Type of appliance (boiler or warm air furnace); and
- Boilers, pressure vessels, and pressure relief devices shall be stamped in accordance with M.G.L. c. 146, §§ 24 and 34.