CHAPTER 34 - EXISTING BUILDINGS CODE - AMENDMENTS

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 revise the IBC, IEBC, IMC, and IECC.

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**.

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.

780 CMR: MASSACHUSETTS AMENDMENTS TO THE INTERNATIONAL BUILDING CODE 2015

CHAPTER 34: EXISTING BUILDING CODE

780 CMR 34.00 adopts the International Existing Building Code-2015 with sections or text modified or added as follows:

101.1 Revise section as follows:

[A] 101.1 Title. These regulations shall be known as the Existing Building Code of Massachusetts, hereinafter referred to as 780 CMR 34.00.

101.2 Revise section as follows:

- [A] 101.2 Scope. The provisions of the *International Existing Building Code*-2015 shall apply to the repair, alteration, change of occupancy, addition to and relocation of existing buildings. **Notes**:
 - 1. If requirements in 780 CMR 34.00 conflict with similar requirements in 780 CMR 1.00: Scope and Administration (Unique to Massachusetts), then 780 CMR 1.00 controls.
 - 2. When 780 CMR 34.00 references requirements in other I-Codes, see 780 CMR 1.00: Scope and Administration (Unique to Massachusetts) for guidance on how to use those I-Codes.
 - 3. Requirements in 780 CMR 34.00 for plumbing, fuel gas, electrical, elevators, fire, or accessibility shall be replaced by the requirements of the Massachusetts specialty codes, as indicated in 780 CMR 1.00: Scope and Administration (Unique to Massachusetts).

104.2.2.1 Revise subsection as follows:

104.2.2.1 Building Investigation and Evaluation. For any proposed work regulated by 780 CMR 34.00 and subject to section 107 of 780 CMR, as a condition of the issuance of a permit, the building owner shall cause the existing building (or portion thereof) to be investigated and evaluated in accordance with the provisions of 780 CMR 34.00. The investigation and evaluation shall be in sufficient detail to ascertain the effects of the proposed work on at least these systems: structural, means of egress, fire protection, energy conservation, lighting, hazardous materials, accessibility, and ventilation for the space under consideration and, where necessary, the entire building or structure and its foundation if impacted by the proposed work. The results of the investigation and evaluation, along with any proposed compliance alternatives, shall be submitted to the building official in written report form.

104.11 Revise section as follows:

104.11 Compliance Alternative. Where compliance with the provisions of the code for new construction, required by 780 CMR 34.00, is impractical because of construction difficulties or regulatory conflicts, compliance alternatives may be accepted by the building official. The building official may accept these compliance alternatives, archaic materials and assemblies in Resource A of 780 CMR 34.00, or other alternatives proposed. If the compliance alternative involves fire protection systems, the building official shall consult with the fire official. Compliance alternatives, if any are proposed, shall be included with the application for a permit and shall identify all items of noncompliance or partial compliance with the requirements of 780 CMR 34.00, and for approval by the building official. The building official shall respond to the acceptability of any proposed compliance alternatives within 30 days of the filing of the permit application. Where proposed compliance alternatives are, in the opinion of the building official, unacceptable, or where issues of noncompliance remain, the permit applicant shall have the remedies prescribed by section 113 of 780 CMR.

202 Revise definitions and add definitions as follows:

CODE OFFICIAL. See 780 CMR 2.00: Definitions, building official.

COMPLIANCE ALTERNATIVE. An alternative life-safety construction feature which meets or exceeds the requirements or intent of a specific provision of 780 CMR. The building official is authorized to approve or disapprove compliance alternatives. Compliance alternatives are allowed only for existing buildings.

REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. See 780 CMR 2.00: Definitions, registered design professional.

ROOF RECOVER. The process of installing an additional roof covering over a prepared existing roof covering.

301.1 Add the following to the end of the section:

Automatic sprinkler systems may be required by M.G.L. c. 148, §§ 26A, 26A½, 26G, 26G½, 26H, or 26I; or by M.G.L. c. 272, §§ 86 through 86D. See sections 101.4.5 and 903.2 of 780 CMR for additional guidance.

301.1.4.2 Add the following exceptions to Item 1.

Exceptions:

- 1. 780 CMR using 50% of prescribed forces when directed here by section 807.5, provided there is no substantial structural alteration, as defined by 907.4.2.
- 2. 780 CMR using either:
 - a. 50% of prescribed forces when directed here by section 1103.3.1 and when the vertical addition increases the building area less than or equal to 30%; or
 - b. 75% of prescribed forces when directed here by section 1103.3.1 and when the vertical addition increases the building area more than 30% but less than 50%.

302.6 through 302.10.1.3 Add the following sections and subsections as follows:

302.6 Masonry Parapets. The following exception applies to requirements in 780 CMR 34.00 for masonry parapets:

Exception: If the height-to-thickness ratio of an unbraced unreinforced masonry parapet does not exceed 2.5, then bracing is not required. For the purpose of this exception, the height shall be measured from either the level of tension anchors or the roof sheathing, whichever is lower.

302.7 Structural Requirements Pertaining to Roofing Work.

- 1. Structural requirements of parapets of unreinforced masonry required by sections 403.5 and 707.3.1 of 780 CMR 34.00 shall only apply when the intended alteration requires a permit for reroofing and when roof covering is removed from the entire roof diaphragm and not by the 25% roof area trigger found in sections 403.5 and 707.3.1 of 780 CMR 34.00.
- 2. Structural requirements of roof diaphragms resisting wind loads in high-wind regions required by sections 403.8 and 707.3.2 of 780 CMR 34.00, when the intended alteration requires a permit for reroofing, shall only apply when roof covering is removed from the entire roof diaphragm and the building is located where the ultimate design wind speed is greater than 150 mph and the building is Risk Category IV in accordance with Table 1604.5 of 780 CMR.

302.8 Structural Requirements Pertaining to Major Alterations.

- 1. Structural requirements required by sections 403.6 and 907.4.5 of 780 CMR 34.00 for unreinforced masonry walls shall apply to buildings in seismic design category B in addition to categories C, D, E, and F found in these sections and shall require roof and floor levels to be anchored to the walls.
- 2. Structural requirements required by sections 403.7 and 907.4.6 of 780 CMR 34.00 for unreinforced masonry parapets shall apply to buildings in seismic design category B in addition to categories C, D, E, and F found in these sections.
- 302.9 Provisions for Change in Occupancy Classification to R, I, or E-Use. Notwithstanding other requirements in 780 CMR 34.00, see 780 CMR 9.00: Fire Protection Systems and applicable provisions of 527 CMR: Board of Fire Prevention Regulations for certain carbon monoxide detection requirements when a change of occupancy classification to R, I, or E-Use occurs.

302.10 Fire Detection Systems in R-2 Uses Which Are Not Currently Equipped with Sprinklers. When 780 CMR 34.00 requires a smoke detection system in an R-2 Use and does not additionally require an NFPA 13, 13R, or 13D system installed throughout the building, then subsections 302.10.1 through 302.10.3 shall apply.

302.10.1 Heat Detection. If a building fire alarm system is provided, a heat detector shall be provided inside each dwelling unit within six feet of the entrance door. The heat detectors shall be connected to the building fire alarm system and cause a general alarm throughout the building upon activation. This shall also apply to the R-2 Use of a mixed use building.

Exception: Buildings containing three units or fewer and not provided with a building fire alarm system that comply with 302.10.3.1.

302.10.2 Common Area Detection. If a building fire alarm system is provided, smoke detectors shall be provided in the common areas of the building. The common area detectors shall be connected to the building fire alarm system and cause a general alarm throughout the building upon activation. This shall also apply to the R-2 Use of a mixed use building.

Exception: Buildings containing three units or fewer and not provided with a building fire alarm system that comply with 302.10.3.1.

302.10.3 Dwelling Unit Detection. Interconnected dwelling unit smoke detection shall sound within that dwelling unit only.

Exception: For buildings of three stories or fewer used exclusively as R-2 Use with six or fewer dwelling units and with at least two means of egress serving each dwelling unit, the fire detection system may comply with the all of the following requirements:

1. Interconnected dwelling unit smoke detection shall sound within that dwelling unit only.

2. Area smoke detection shall be provided throughout common uses spaces, including shared means of egress.

3. A heat detector shall be provided inside each dwelling unit within six feet of doors serving common areas.

Upon activation of either the common area smoke detection or the heat detection, a general alarm shall be sounded throughout the building.

302.10.3.1 Buildings with Three Dwelling Units or Fewer. In buildings containing three units or fewer, which are not protected with sprinklers and which are not provided with a building fire alarm system, each dwelling unit shall have additional interconnected smoke detectors on the stairway side of all doors leading to common interior stairways. If there is a common basement, a separate interconnected system of smoke detectors, including smoke detectors on the stairway side of all doors leading to interior stairways, shall be provided to serve the basement level only.

404.4.1 Add subsection as follows:

404.4.1 Repairs for Less than Substantial Damage due to Snow Load Effects. Damaged roof framing components that have sustained less than substantial structural damage caused by or related to snow load effects shall be rehabilitated to comply with the applicable provisions for dead and snow loads in 780 CMR 16.00: Structural Design. Undamaged roof framing components that receive dead or snow loads from rehabilitated components shall also be rehabilitated to comply with the design loads of the rehabilitated design.

606.2.1.1 Add subsection as follows:

606.2.1.1 Repairs for Less than Substantial Damage due to Snow Load Effects. Damaged roof framing components that have sustained less than substantial structural damage caused by or related to snow load effects shall be rehabilitated to comply with the applicable provisions for dead and snow loads in 780 CMR 16.00: Structural Design. Undamaged roof framing components that receive dead or snow loads from rehabilitated components shall also be rehabilitated to comply with the design loads of the rehabilitated design.

706.3 Add exceptions 5 and 6 as follows:

- 5. For roof replacement and roof recover projects, where the existing roof assembly includes a built-up roof that is adhered to the roof deck, the existing built up roof shall be permitted to remain in place and be restored to good condition to serve as a sound substrate for the new roof covering, in accordance with the roof manufacturer's requirements.
- 6. For roof recover projects where there is only one layer of existing roofing present, existing continuous insulation shall be permitted to remain in place, provided all wet or otherwise deteriorated portions of the insulation is removed and replaced.

804.2 Add exception as follows:

Exception: R-2 structures of three units undergoing Level 2 alterations, are exempt from the requirements of this section provided that:

- 1. The work area is for a single unit; and
- 2. No other permits for Level 2 work have been issued for the building in the previous two years.
- 804.2.2 Add "R-3" between "R-2" and "R-4" in the title and text of the subsection.
- 804.2.2 Delete the word "municipal" from the exception.
- 804.2.3 Delete the word "municipal" from the text of the subsection.
- 804.2.4, item 2 Delete the word "municipal" from the exception.
- 804.2.5 Replace the subsection as follows:
 - **804.2.5 Supervision**. Fire sprinkler systems required by this section shall be supervised by the method required in section 903.4.1 (code for new construction) of 780 CMR.

805.4.4 Amend the subsection as follows:

805.4.4 Panic Hardware. In an work area, and in the egress path from any work area to the exit discharge, in buildings or portions thereof of Group A assembly occupancies with an occupant load greater than 100, and nightclubs with an occupant load of 50 or greater, all required exit doors equipped with latching devices shall be equipped with approved panic hardware.

- 904.1.1 Delete the word "municipal" from the text of the subsection.
- 1002.1 Delete items 1 through 11, and revise the section as follows:

1002.1 Compliance with the Building Code. Where the character or use of an existing building or part of an existing building is changed to a special use or occupancy as found in 780 CMR 4.00: Special Detailed Requirements Based on Use and Occupancy, the special use or occupancy shall comply with the applicable requirements of that chapter. Areas changed to incidental uses shall comply with 780 CMR Table 509.

1401.1.2 Add subsection as follows:

1401.1.2 Compliance Alternatives Notification. The building official shall ensure that the BBRS is provided with information regarding any and all compliance alternatives accepted by the building official within two weeks of acceptance.

1401.2 Revise the section as follows:

1401.2 Applicability. The provisions of sections 1401.2.1 through 1401.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R and S. These provisions shall not apply to buildings with occupancies in Group H or I-1, I-3 or I-4.

1401.3.4 Add subsection as follows:

1401.3.4 Peer Review. At the discretion of the building official, the owner shall engage a registered design professional to review the performance compliance evaluation and methodologies proposed to determine compliance with this section. The registered design professional shall prepare a written report to the building official summarizing the results of their review. Items identified by the registered design professional as needing modification in order to be in compliance with this section shall be addressed to the satisfaction of the building official prior to the issuance of a building permit.

1401.4.1 Add exception as follows:

Exception: Residential buildings three stories or less above grade plane and comprised of light frame construction and of six units or fewer shall not need to demonstrate compliance to the loads specified in 780 CMR 16.00: Structural Design. Any structural alterations made to the building shall comply with the code for new construction as practicable or 780 CMR 4.00: Special Detailed Requirements Based on Use and Occupancy.

1401.6.17 Add note as follows:

Note: Automatic sprinklers required by M.G.L. c. 148, § 26G need not be considered "required sprinklers" for the purposes of section 1401 of 780 CMR 34.00.

1501.1 Add the following note to the section:

Note: As applicable, 527 CMR: Board of Building Regulations and Standards, in conjunction with applicable provisions of M.G.L. c. 148, § 27A, shall be satisfied if fire protection systems are to be dismantled, shut-off, or modified.

780 CMR: STATE BOARD OF BUILDING REGULATIONS AND STANDARDS

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