CHAPTER 21 – MASONRY - 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 21: MASONRY

Add a section as follows:

SECTION 2106.2 Amendments to Chapter 7 of TMS 402/ACI 530/ASCE 5

Note: Numbers that follow are section numbers of TMS 402/ACI 530/ASCE 5.

7.3.2.5 At the end of the last sentence, add the following:

or ⅓ the length of the wall, whichever is less.

7.3.2.5.1 Add subsection:

7.3.2.5.1 Vertical Reinforcement at Openings. Two adjacent cells shall be grouted solid at each side of each opening and continuous vertical reinforcement shall be located in either of these two cells. Bars in a grouted cell may be offset horizontally by one cell to mitigate interference due to lintels.

7.3.2.5.2 Add subsection:

7.3.2.5.2 Horizontal Shear Reinforcement. Horizontal shear reinforcement shall be provided by horizontal deformed bars in grouted bond beams at a maximum vertical spacing of 48 inches on center. The vertical spacing of horizontal deformed bars in grouted bond beams may be increased to a maximum of 104 inches on center if all of the following conditions are met:

a. Welded wire reinforcement (ladder or truss configuration) shall be provided at a maximum vertical spacing of eight inches on center and placed in a bed joint not less than ⅜ inches thick.

b. The longitudinal side wires of the horizontal shear reinforcement shall be a minimum of $^{3}/_{16}$-inch diameter with #9 cross or diagonal wire. Additional joint reinforcement or reinforcing bars in grouted bond courses shall be added to meet the design requirements.

c. Joint reinforcement shall be lapped to develop the full capacity of the reinforcing in the plane of the wall, at corners, and at intersecting shear walls.

d. Joint reinforcement wires shall be anchored with hooks or bends around the vertical jamb reinforcement at openings and ends of walls.

7.3.2.11 Revise note (a) to read as follows:

(a) Reinforcement shall be provided in accordance with sections 7.3.2.6(a) and 7.3.2.6(b), and (f), except where prestressing tendons are located.

7.5 Add section as follows:

7.5 Nonparticipating Elements. Notwithstanding the requirements of section 7.4 to the contrary, non-participating elements (*i.e.*, those isolated from in-plane force) shall be reinforced in accordance with section 7.4.3, except as follows:

1. Reinforcement shall be provided in both the horizontal and vertical directions, and spacing of vertical bars shall not exceed 72 inches for Seismic Design Categories B and C, and 48 inches for Seismic Design Category D.
2. For exterior walls, and for walls enclosing exits, exit discharges, and elevator shafts, the minimum cross-sectional area of reinforcement in the direction of the span shall be 0.0007 times the gross cross-sectional area of the wall, and shall consist of reinforcing steel bars in grouted cells, grouted bond courses, or grouted collar joints. The maximum spacing of the bars shall be the lesser of ⅓ of the span or 48 inches.

NON-TEXT PAGE