

CHAPTER 21: MASONRY

2101.2.7 through 2101.2.9 Add subsections:

2101.2.7 Lateral Load Resisting System. The lateral load resisting system shall include all masonry walls that are not structurally isolated from imposed in-plane loads other than from their own mass. All such walls shall be considered to be shear walls.

Exception. Elements not isolated from in-plane shear, such as narrow masonry walls and masonry wall piers between openings or between openings and the ends of the wall, which each have an in-plane stiffness less than 5% of the total stiffness of the lateral load resisting system in the same direction, may be omitted from the lateral load resisting system in that direction provided that the sum of the stiffnesses of the omitted elements is not greater than 10% of the total stiffness of the lateral load resisting system in that direction.

2101.2.8 Elements Omitted from Lateral Load Resisting System. Elements not isolated from in-plane forces, but not considered part of the lateral load resisting system as permitted in 2101.2.7, shall have sufficient strength and ductility to maintain vertical load carrying capacity when subjected to the design story drift.

2101.2.9 Walls Isolated from the Lateral Load Resisting System. Walls that are isolated from the lateral load resisting system are to be designed to resist applicable out-of-plane forces defined in Chapter 16, and to transfer the out-of-plane forces to the primary structure or to intersecting walls.

2106.2 Add subsection:

2106.2 Amendments to 1.17 of TMS 402/ACI 530/ASCE 5 (*Numbers that follow are section numbers of TMS 402/ACI 530/ASCE 5*).

1.17.3.2.5 Replace with:

1.17.3.2.5 Intermediate reinforced masonry shear walls shall comply with section 1.17.3.2.6 except:

- a. hooks are not required at the ends of reinforcing bars, and
- b. section 1.17.3.2.6.1 is not applicable.

1.17.3.2.6 Add note (f) as follows:

(f) All reinforcement shall be reinforcing steel bars in grouted cells, in grouted bond courses, or in grouted collar joints.

1.17.3.2.11 Revise note (a) to read as follows:

(a) Reinforcement shall be provided in accordance with sections 1.17.3.2.6(a), (b), and (f), except where prestressing tendons are located.

1.17.4 At the end of this section add this text:

Notwithstanding the requirements of section 1.17.4 to the contrary, non-participating elements (*i.e.* those isolated from in-plane force) shall be reinforced in accordance with section 1.17.4.3, 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 $\frac{1}{3}$ of the span or 48 inches.

NON-TEXT PAGE