

Chapter 21 - Masonry

SECTION 2101 GENERAL

2101.1 Scope. This chapter shall govern the materials, design, construction and quality of masonry.

2101.2 Design methods. Masonry shall comply with the provisions of one of the following design methods in this chapter as well as the requirements of Sections 2101 through 2104. Masonry designed by the *allowable stress design* provisions of Section 2101.2.1, the strength design provisions of Section 2101.2.2 or the prestressed masonry provisions of Section 2101.2.3 shall comply with Section 2105.

2101.2.1 Allowable stress design. Masonry designed by the *allowable stress design* method shall comply with the provisions of Sections 2106 and 2107.

2101.2.2 Strength design. Masonry designed by the strength design method shall comply with the provisions of Sections 2106 and 2108, except that autoclaved aerated concrete (AAC) masonry shall comply with the provisions of Section 2106, Section 1613.6.4 and Chapter 1 and Appendix A of TMS 402/ACI 530/ASCE 5.

2101.2.3 Prestressed masonry. Prestressed masonry shall be designed in accordance with Chapters 1 and 4 of TMS 402/ACI 530/ASCE 5 and Section 2106. *Special inspection* during construction shall be provided as set forth in Section 1704.5.

2101.2.4 Empirical design. Masonry designed by the empirical design method shall comply with the provisions of Sections 2106 and 2109 or Chapter 5 of TMS 402/ACI 530/ASCE 5.

2101.2.5 Glass unit masonry. Glass unit masonry shall comply with the provisions of Section 2110 or Chapter 7 of TMS 402/ACI 530/ASCE 5.

2101.2.6 Masonry veneer. Masonry veneer shall comply with the provisions of Chapter 14 or Chapter 6 of TMS 402/ACI 530/ASCE 5.

2101.3 Construction documents. The *construction documents* shall show all of the items required by this code including the following:

1. Specified size, grade, type and location of reinforcement, anchors and wall ties.
2. Reinforcing bars to be welded and welding procedure.
3. Size and location of structural elements.
4. Provisions for dimensional changes resulting from elastic deformation, creep, shrinkage, temperature and moisture.
5. Loads used in the design of masonry.
6. Specified compressive strength of masonry at stated ages or stages of construction for which masonry is designed, except where specifically exempted by this code.
7. Details of anchorage of masonry to structural members, frames and other construction, including the type, size and location of connectors.
8. Size and location of conduits, pipes and sleeves.