

Changes to 2009 International Building Code – Chapter 21 (Masonry)

Overview of changes:

1. The name of the 2008 edition of the Masonry Standards Joint Committee (MSJC) code has been changed to *Building Code Requirements for Masonry Structures (TMS 402/ACI 530/ASCE 5) & Specifications for Masonry Structures (TMS 602/ACI 530.1/ASCE 6)* to recognize the lead sponsorship role of The Masonry Society.
2. Majority of the changes to the masonry provisions of Chapter 21 were done to coordinate the code requirements with the 2008 edition of the MSJC code.

Significant changes to the 2009 IBC from the 2007 CBC:

SECTION 2101 GENERAL:

Section 2101.2.2 Strength design. Limitations for use of autoclaved aerated concrete (AAC) in buildings based on Seismic Design Category moved to Section 1613.6.4. *(Not permitted for buildings in Seismic Design Categories D, E & F)*

Section 2101.3 Construction documents. Additional items required to be shown on construction documents (design loads, specified compressive strength of masonry, anchorage details, location of pipe penetrations, testing & special inspection requirements)

SECTION 2102 DEFINITIONS AND NOTATIONS:

Deleted definitions and notations as a result of provisions being referenced in the MSJC code.

SECTION 2103 MASONRY CONSTRUCTION MATERIALS:

Section 2103.8 Mortar. Deleted Table 2103.8(1) Mortar Proportions and Table 2103.8(2) Mortar Properties and reference Articles 2.1 and 2.6A of TMS602/ACI530.1/ASCE6 instead. *(The proportions and properties table for specifying mortar can be found in Article 2.1 of the Commentary)*

Section 2103.11 Mortar for AAC masonry. Deleted Sections 2103.11.1 and 2103.11.2 since Articles 2.1 C.1 and 2.1 C.2 of TMS602/ACI530.1/ASCE6 is referenced instead.

Section 2103.12 Grout. Deleted Table 2103.12 and reference Article 2.2 of TMS602/ACI530.1/ASCE6 instead.

Section 2103.13 Metal reinforcement and accessories. Deleted Sections 2103.13.1 through 2103.13.8 since Article 2.4 of TMS602/ACI530.1/ASCE6 is referenced instead.

SECTION 2104 CONSTRUCTION:

Section 2104.1.2 Placing mortar and units. Deleted Sections 2104.1.2.1 through 2104.1.2.7 since TMS602/ACI530.1/ASCE6 is referenced instead. *(Requirements can be found in Article 3.3B of the Specification)*

Section 2104.1.3 Installation of wall ties. TMS602/ACI530.1/ASCE6 is now referenced for requirements. *(Requirements can be found in Article 3.4C of the Specification)*

Section 2104.1.5 Lintels. Removed “*Minimum length of end support shall be 4 inches.*” from section. *(Requirement can be found in Section 2.3.3.3.1 of the TMS402/ACI530/ASCE5)*

Section 2104.2 Corbeled masonry. Modified section to reference Section 1.12 of TMS402/ACI530/ASCE5.

Section 2104.3 Cold weather construction. Modified section to reference Article 1.8C of TMS602/ACI530.1/ASCE6.

Section 2104.4 Hot weather construction. Modified section to reference Article 1.8D of TMS602/ACI530.1/ASCE6.

SECTION 2105 QUALITY ASSURANCE:

Section 2105.2.2.1.1 Clay masonry. Deleted reference to ASTM C67 in Item 1 and modified Item 3.1 to reference Article 2.2 of TMS602/ACI530.1/ASCE6.

Section 2105.2.2.1.2 Concrete masonry. Deleted reference to ASTM C140 in Item 1 and modified Item 3.1 to reference Article 2.2 of TMS602/ACI530.1/ASCE6.

Section 2105.2.2.1.3 AAC masonry. Modified Item 3.1 to reference Article 2.2 of TMS602/ACI530.1/ASCE6.

SECTION 2106 SEISMIC DESIGN:

Section 2106.1 Seismic design requirements for masonry. Modified section to reference Section 1.17 of TMS402/ACI530/ASCE5 for seismic design requirements.

SECTION 2107 ALLOWABLE STRESS DESIGN:

Updated reference sections as revised in TMS402/ACI530/ASCE5 and removed redundant clauses.

SECTION 2108 STRENGTH DESIGN OF MASONRY:

Updated reference sections as revised in TMS402/ACI530/ASCE5 and removed redundant clauses.

SECTION 2109 EMPIRICAL DESIGN OF MASONRY:

Section 5.1.2.2 of TMS 402/ACI530/ASCE5 does not permit empirical design for design or construction of masonry for buildings, parts of buildings or other structures in Seismic Design Categories D, E or F.

SECTION 2110 GLASS UNIT MASONRY:

2110.1 General. Modified section to reference Chapter 7 of TMS402/ACI530/ASCE5 for construction of glass unit masonry.

SECTION 2111 MASONRY FIREPLACES:

Seismic reinforcing and anchorage of masonry or concrete fireplaces in Seismic Design Category C is now required to meet same requirements as in Seismic Design Category D.

SECTION 2112 MASONRY HEATERS:

No changes.

SECTION 2113 MASONRY CHIMNEYS:

Seismic reinforcing and anchorage of masonry or concrete chimneys in Seismic Design Category C is now required to meet same requirements as in Seismic Design Category D.