

Building Code Requirements and Specification for Masonry Structures

Containing

Building Code Requirements for Masonry Structures
(TMS 402-11/ACI 530-11/ASCE 5-11)

Specification for Masonry Structures
(TMS 602-11/ACI 530.1-11/ASCE 6-11)

and Companion Commentaries

Developed by the Masonry Standards Joint Committee (MSJC) of



Advancing the knowledge of masonry



SPECIFICATION

3.3 D. Embedded items and accessories — Install embedded items and accessories as follows:

1. Construct chases as masonry units are laid.
2. Install pipes and conduits passing horizontally through nonbearing masonry partitions.
3. Place pipes and conduits passing horizontally through piers, pilasters, or columns.
4. Place horizontal pipes and conduits in and parallel to plane of walls.
5. Install and secure connectors, flashing, weep holes, weep vents, nailing blocks, and other accessories.
6. Install movement joints.
7. Aluminum — Do not embed aluminum conduits, pipes, and accessories in masonry, grout, or mortar, unless effectively coated or covered to prevent chemical reaction between aluminum and cement or electrolytic action between aluminum and steel.

3.3 E. Bracing of masonry — Design, provide, and install bracing that will assure stability of masonry during construction.

3.3 F. Site tolerances — Erect masonry within the following tolerances from the specified dimensions.

1. Dimension of elements
 - a. In cross section or elevation
 $-\frac{1}{4}$ in. (6.4 mm), $+\frac{1}{2}$ in. (12.7 mm)
 - b. Mortar joint thickness

bed $\pm\frac{1}{8}$ in. (3.2 mm)
head $-\frac{1}{4}$ in. (6.4 mm), $+\frac{3}{8}$ in. (9.5 mm)
collar $-\frac{1}{4}$ in. (6.4 mm), $+\frac{3}{8}$ in. (9.5 mm)
glass unit masonrysee Article 3.3 B.6.c
 - c. Grout space or cavity width, except for masonry walls passing framed construction
 $-\frac{1}{4}$ in. (6.4 mm), $+\frac{3}{8}$ in. (9.5 mm)

COMMENTARY

3.3 E. Bracing of masonry — For guidance on bracing of masonry walls for wind, consult Standard Practice for Bracing Masonry Walls Under Construction^{3.2}.

3.3 F. Site tolerances — Tolerances are established to limit eccentricity of applied load. Since masonry is usually used as an exposed material, it is subjected to tighter dimensional tolerances than those for structural frames. The tolerances given are based on structural performance, not aesthetics.

The provisions for cavity width shown are for the space between wythes of non-composite masonry. The provisions do not apply to situations where masonry extends past floor slabs, spandrel beams, or other structural elements.

The remaining provisions set the standard for quality of workmanship and ensure that the structure is not overloaded during construction.