



Designation: C73 – 05

# Standard Specification for Calcium Silicate Brick (Sand-Lime Brick)<sup>1</sup>

This standard is issued under the fixed designation C73; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

*This standard has been approved for use by agencies of the Department of Defense.*

## 1. Scope\*

1.1 This specification covers brick made principally from sand and lime and intended for use in brick masonry. Two grades of brick are covered:

1.1.1 *Grade SW*—Brick intended for use where exposed to temperature below freezing in the presence of moisture.

NOTE 1—As a typical example, brick used for foundation courses and parapets in the northeastern quarter of the United States should conform to Grade SW.

1.1.2 *Grade MW*—Brick intended for use where exposed to temperature below freezing but unlikely to be saturated with water.

NOTE 2—As a typical example, brick exposed in the face of the wall other than parapet or foundations, or brick intended for structures located in regions of the United States characterized by less severe frost action or by drier climate than is found in the northeastern quarter of the United States should conform to Grade MW.

1.1.3 When the term brick is used in this specification, it is understood to mean brick or solid masonry units.

1.2 If brick having a particular color, texture, finish, or uniformity is desired, these features shall be specified separately by the purchaser.

1.3 The text of this standard references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.4 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

## 2. Referenced Documents

2.1 *ASTM Standards*:<sup>2</sup>

C140 Test Methods for Sampling and Testing Concrete

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee C15 on Manufactured Masonry Units and is the direct responsibility of Subcommittee C15.03 on Concrete Masonry Units and Related Units.

Current edition approved May 15, 2005. Published June 2005. Originally approved in 1928. Last previous edition approved in 1999 as C73–99a. DOI: 10.1520/C0073-05.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

TABLE 1 Physical Requirements

Designation	Compressive Strength min, psi (MPa), (brick tested flatwise) average gross area		Water Absorption, max lb/ft <sup>3</sup> (kg/m <sup>3</sup> )
	Average of 3 Brick	Individual Brick	
Grade SW	5500 (37.9)	4500 (31.0)	15 (240)
Grade MW	3500 (24.1)	3000 (20.7)	18 (288)

Masonry Units and Related Units

C1209 Terminology of Concrete Masonry Units and Related Units<sup>3</sup>

C1232 Terminology of Masonry

## 3. Terminology

3.1 Terminology defined in Terminology C1209 and Terminology C1232 shall apply for this specification.

## 4. Physical Requirements

4.1 The brick shall conform to the physical requirements for the grade specified, as prescribed in Table 1.

4.2 Unless otherwise specified by the purchaser, brick of Grades SW and MW shall be accepted. Grade SW shall be accepted in lieu of Grade MW.

## 5. Dimensions and Permissible Variations

5.1 The size of brick shall be as specified by the purchaser and the average size of brick furnished shall approximate the size specified in the invitation for bids.

5.2 No overall dimension (width, height, and length) shall differ by more than  $\pm 1/8$  in. (3.2 mm) from the specified standard dimension. The width requirement does not apply to textured finishes such as split or rocked faces. Standard dimensions of units are the manufacturer's designated dimensions.

## 6. Finish and Appearance

6.1 All units shall be sound and free of cracks or other defects that interfere with the proper placement of the unit or

<sup>3</sup> Withdrawn. The last approved version of this historical standard is referenced on www.astm.org.

\*A Summary of Changes section appears at the end of this standard.