

Designation: C56 - 13

Standard Specification for Structural Clay Nonloadbearing Tile¹

This standard is issued under the fixed designation C56; 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 (ε) 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 structural clay nonloadbearing tile (partition, fireproofing, and furring).
- 1.2 The property requirements of this specification apply at the time of purchase. The use of results from testing of tile extracted from masonry structures for determining conformance or non-conformance to the property requirements (Section 5) of this standard is beyond the scope of this specification.
- 1.3 Tile covered by this specification are manufactured from clay, shale, or similar naturally occurring substances and subjected to a heat treatment at elevated temperatures (firing). The heat treatment must develop sufficient fired bond between the particulate constituents to provide the strength and durability requirements of this specification. (See *firing* and *fired bond* in Terminology C1232.)
- 1.4 Fireproofing tile intended for use in load-bearing masonry shall conform to Specification C34.
- 1.5 Tile intended for use in fireproofing structural members shall be of such sizes and shapes that they can be erected to cover completely the exposed surfaces of the members.
- 1.6 The text of this specification references notes and footnotes that provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of this specification.
- 1.7 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

2. Referenced Documents

2.1 ASTM Standards:²

C34 Specification for Structural Clay Load-Bearing Wall Tile

C67 Test Methods for Sampling and Testing Brick and Structural Clay Tile

C1232 Terminology of Masonry

3. Terminology

3.1 *Definitions*—For definitions relating to structural clay nonload-bearing wall tile, refer to Terminology C1232.

4. Classification

- 4.1 One grade of tile is covered, designated Grade NB.
- 4.2 If tile having a particular color (Note 1), texture, or finish are desired, these features shall be specified separately by the purchaser.

Note 1—Color of tile varies with the type of clay used and degree of firing; hence, it cannot be taken as indicative of classification until after it has been related to absorption by actual tests.

5. Physical Properties

5.1 Structural clay nonloadbearing tile shall conform to the following requirements for absorption:

6. Dimensions and Permissible Variations

6.1 No overall dimension shall vary more than 3 % over or under the specified dimension for any form or size of tile. See Note 2.

Note 2—Purchasers and designers should ascertain the type and size of tile, modular or non-modular, available in the locality under consideration and should specify accordingly, stating the size and type represented by the available tile.

Modular sizes are designated by the specified nominal dimensions which are equal to the actual manufactured dimensions plus the thickness of one mortar joint, not to exceed $\frac{1}{2}$ in. (12.7 mm). For example, if the modular, specified, or nominal dimensions of a unit are 4 by 8 by 12 in. (102 by 203 by 305 mm) the actual manufactured dimensions may be $3\frac{1}{2}$ by $7\frac{1}{2}$ by $11\frac{1}{2}$ in. (114.7 by 215.7 by 317.7 mm).

¹ This specification is under the jurisdiction of ASTM Committee C15 on Manufactured Masonry Units and is the direct responsibility of Subcommittee C15.02 on Brick and Structural Clay Tile.

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² 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.

^AThe range in percentage absorption for tile delivered to any one job shall be not more than 12.