



Designation: C 56 – 04

Standard Specification for Structural Clay Non-Load-Bearing Tile¹

This standard is issued under the fixed designation C 56; 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 non-load-bearing tile (partition, fireproofing, and furring). One grade of tile is covered, designated Grade NB.

1.2 The property requirements of this standard 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 3) of this standard is beyond the scope of this standard.

1.3 Tile covered by this standard 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 C 43.)

1.4 Fireproofing tile intended for use in load-bearing masonry shall conform to Specification C 34.

1.5 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 burning; hence, it cannot be taken as indicative of classification until after it has been related to absorption by actual tests.

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.

2. Referenced Documents

2.1 ASTM Standards:²

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.

C 34 Specification for Structural Clay Load-Bearing Wall Tile

C 43 Terminology of Structural Clay Products

C 67 Test Methods of Sampling and Testing Brick and Structural Clay Tile

3. Absorption

3.1 Structural clay non-load-bearing tile shall conform to the following requirements for absorption:

Absorption by 1-h Boiling,^A %

Grade	Individual Maximum
NB	28

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

4. Number of Cells and Weights

4.1 Partition and split furring tile shall conform to the requirements prescribed in Table 1 for total number of cells, number of cells in the direction of wall thickness, and dry weights per square foot of tile.

4.2 The requirements for minimum weights of structural clay non-load-bearing tile shall be waived if the over-all thickness of the shells, measured between the inner and extreme outer surfaces of scored tile, is not less than $\frac{5}{8}$ in. (15.9 mm) and the mean shell thickness of unscored tile is not less than $\frac{1}{2}$ in. (12.7 mm). Thickness of webs shall be not less than $\frac{1}{2}$ in.

5. Dimensions and Permissible Variations

5.1 No over-all 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) (see Section 6.) For example, if the modular, specified, or nominal dimensions of a unit are 4