



Standard Specification for Glazed Brick (Single Fired, Brick Units)¹

This standard is issued under the fixed designation C1405; 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.

1. Scope*

1.1 This specification covers brick, having a ceramic glaze finish fused to the body during the same process as the unit body firing, that are intended for use in masonry and supplying structural or facing components, or both, to the structure. This specification does not cover double-fired glazed brick. Some double-fired decorative glazes have physical properties, which vary from those of single-fired glazes due to the lower temperatures used in applying the decorative coating.

1.2 The property requirements of this specification apply at the time of purchase. The use of results from testing of brick extracted from masonry structures for determining conformance or nonconformance to the property requirements of this specification is beyond the scope of this specification.

1.3 Glazed brick are prismatic units available in a variety of sizes, textures, colors, and shapes. Glazed brick are manufactured from clay, shale, or similar naturally occurring earthy substances and subjected to a heat treatment at elevated temperatures (firing). The heat treatment shall develop a fired bond between the particulate constituents to provide the strength and durability requirements of this specification (see Terminology C1232).

1.4 Glazed brick are shaped during manufacture by molding, pressing, or extrusion, and the shaping method is a way to describe the brick.

1.5 Glazed brick are classified into one of two grades, one of two types, one of two classes, and one of three divisions.

1.6 Opacity of the glaze is not required unless specified by the purchaser.

1.7 The text of this standard 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 standard.

1.8 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.

1.9 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*²

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

C1093 Practice for Accreditation of Testing Agencies for Masonry

C1232 Terminology of Masonry

E84 Test Method for Surface Burning Characteristics of Building Materials

E2105 Practice for General Techniques of Thermogravimetric Analysis (TGA) Coupled With Infrared Analysis (TGA/IR)

2.2 *NFPA Standard:*

NFPA No. 255 Test for Surface Burning Characteristics of Building Materials³

2.3 *UL Standard:*

UL No. 723 Flammability Studies of Cellular Plastics and Other Building Materials Used for Interior Finishes⁴

3. Terminology

3.1 *Definitions*—Terms used in this specification are defined in accordance with Terminology C1232.

4. Classification

4.1 *Grades*—Grades classify glazed brick according to their permissible variation in face dimension as follows. When grade is not specified, the requirements for Grade S govern.

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.

³ Available from National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02169-7471, <http://www.nfpa.org>.

⁴ Available from Underwriters Laboratories (UL), 333 Pfingsten Rd., Northbrook, IL 60062-2096, <http://www.ul.com>.