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Designation: C 1405 – 01a

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

This standard is issued under the fixed designation C 1405; 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 firing, fired bond, glaze, and incipient fusion in Terminology C 43).

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, and one of two classes.

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 which 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 the standard. The values given in parentheses are for information only.

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:*

C 43 Terminology of Structural Clay Products[2]

C 67 Test Methods for Sampling and Testing Brick and Structural Clay Tile[2]

C 1093 Practice for Accreditation of Testing Agencies for Unit Masonry[2]

E 84 Test Method for Surface Burning Characteristics of Building Materials[3]

2.2 *NFPA Standard:*

NFPA No. 255 Test for Surface Burning Characteristics of Building Materials[4]

2.3 *UL Standard:*

UL No. 723 Flammability Studies of Cellular Plastics and Other Building Materials Used for Interior Finishes[5]

2.4 *ICBO Standard:*

UBC No. 42-1 Test Method for Fire Hazard Classification of Building Material[6]

2.5 *Federal Standard:*

Federal Standard Test No. 141 Abrasion Resistance (Taber Abraser)[7]

3. Terminology

3.1 *Definitions*—Terms used in this specification are defined in accordance with Terminology C 43.

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.

4.1.1 *Grade S (Select)*, for use with normal mortar joint widths (⅜ to ½ in. (9.6 to 12.8 mm)).

4.1.2 *Grade SS (Select Sized or Ground Edge)*, for use with

[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] *Annual Book of ASTM Standards*, Vol 04.05.

[3] *Annual Book of ASTM Standards*, Vol 04.07.

[4] Available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

[5] Available from Underwriters Laboratories, 1285 Walt Whitman Road, Melville, NY 11747.

[6] Available from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, CA 90601.

[7] Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

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

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