



Designation: C 744 – 05

## Standard Specification for Prefaced Concrete and Calcium Silicate Masonry Units<sup>1</sup>

This standard is issued under the fixed designation C 744; 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.*

Note— Sections 5.7 and 7.1 were corrected and the year date changed on April 14, 2005.

### 1. Scope\*

1.1 This specification covers prefaced concrete masonry units with the exposed-to-view-in-place surfaces covered at the point of manufacture with resin, resin and inert filler, or cement and inert filler to produce a smooth resinous tile facing.

1.2 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.

### 2. Referenced Documents

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

- C 55 Specification for Concrete Building Brick
- C 73 Specification for Calcium Silicate Face Brick (Sand-Lime Brick)
- C 90 Specification for Loadbearing Concrete Masonry Units
- C 129 Specification for Nonloadbearing Concrete Masonry Units
- C 140 Test Methods for Sampling and Testing Concrete Masonry Units and Related Units
- C 501 Test Method for Relative Resistance to Wear of Unglazed Ceramic Tile by the Taber Abraser
- C 1209 Terminology of Concrete Masonry Units and Related Units
- C 1232 Terminology of Masonry
- D 822 Practice for Conducting Tests on Paint and Related Coatings and Materials Using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus
- D 2244 Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates

D 2486 Test Method for Scrub Resistance of Interior Latex Flat Wall Paints

E 84 Test Method for Surface Burning Characteristics of Building Materials

### 3. Terminology

3.1 Terminology defined in Terminology C 1209 and C 1232 shall apply for this specification.

### 4. Materials

4.1 Concrete masonry units on which prefaced surfaces are molded shall meet the requirements of:

4.1.1 Specification C 55 for Concrete Building Brick.

4.1.2 Specification C 73 for Calcium Silicate Face Brick (Sand-Lime Brick).

4.1.3 Specification C 90 for Loadbearing Concrete Masonry Units.

4.1.4 Specification C 129 for Nonloadbearing Units.

NOTE 1—The purchaser of prefaced units should indicate the applicable specification and the type and grade of unit required. Where prefaced units are required for exterior use, the manufacturer should be consulted for material suitable for this purpose.

### 5. Facing Requirements Facing Requirements

5.1 *Resistance to Cracking, Cracking, or Spalling*—There shall be no crazing, cracking, or spalling of the facing material when the unit is tested in accordance with 7.2.

5.2 *Resistance to Chemicals*—The condition of the surface shall show no change after testing with each of the chemicals listed in 7.3.

5.3 *Adhesion*—When viewed without magnification, there shall be no failure of the adhesion of the facing material to the concrete masonry unit at the time of failure of the entire prefaced unit when tested in compression in accordance with 7.4.

5.4 *Abrasion*—The wear index shall exceed 130 when tested in accordance with 7.5.

5.5 *Surface Burning Characteristics*—When tested in accordance with 7.6, the surfaces of the prefaced units shall have a flame spread classification not greater than 25 without

<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 April 14, 2005. Published April 2005. Originally approved in 1973. Last previous edition approved in 2004 as C 744 – 04.

<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.

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