



Designation: C129 – 11

# Standard Specification for Nonloadbearing Concrete Masonry Units<sup>1</sup>

This standard is issued under the fixed designation C129; 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.*

## 1. Scope\*

1.1 This specification covers hollow and solid nonloadbearing concrete masonry units made from portland cement, water, and mineral aggregates with or without the inclusion of other materials. These units are intended for use in nonloadbearing partitions, but under certain conditions they may be suitable for use in nonloadbearing exterior walls above grade where effectively protected from the weather.

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.

1.3 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.

NOTE 1—Concrete masonry units covered by this specification are made from lightweight or normal weight aggregates, or both.

NOTE 2—When particular features are desired, such as density classification, surface texture for appearance or bond, finish, color, fire resistance, insulation, acoustical properties, or other special features, such properties should be specified separately by the purchaser. However, suppliers should be consulted as to the availability of units having the desired features.

## 2. Referenced Documents

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

- C33 Specification for Concrete Aggregates
- C140 Test Methods for Sampling and Testing Concrete Masonry Units and Related Units
- C150 Specification for Portland Cement
- C207 Specification for Hydrated Lime for Masonry Purposes

<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 June 1, 2011. Published June 2011. Originally approved in 1937. Last previous edition approved in 2006 as C129 – 06. DOI: 10.1520/C0129-11.

<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.

- C331 Specification for Lightweight Aggregates for Concrete Masonry Units
- C456 Test Method for Hydration Resistance of Basic Bricks and Shapes
- C595 Specification for Blended Hydraulic Cements
- C618 Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
- C989 Specification for Slag Cement for Use in Concrete and Mortars
- C1157 Performance Specification for Hydraulic Cement
- C1232 Terminology of Masonry

## 3. Terminology

3.1 Terminology defined in Terminology C1232 shall apply for this specification.

## 4. Classification

4.1 Nonloadbearing concrete masonry units manufactured in accordance with this specification shall conform to one of three density classifications prescribed in Table 1.

## 5. Materials and Manufacture

5.1 *Cementitious Materials*—Materials shall conform to the following applicable specifications:

- 5.1.1 *Portland Cement*—Specification C150.
- 5.1.2 *Blended Hydraulic Cements*—Specification C595.
- 5.1.3 *Hydraulic Cement*—Specification C1157.
- 5.1.4 *Hydrated Lime, Type S*—Specification C207.
- 5.1.5 *Ground Granulated Blast Furnace Slag*—Specification C989.
- 5.1.6 *Pozzolans*—Specification C618.

5.2 *Aggregates*—Aggregates shall conform to the following ASTM specifications, except that grading requirements shall not necessarily apply:

- 5.2.1 *Normal Weight Aggregates*—Specification C33.
- 5.2.2 *Lightweight Aggregates*—Specification C331.

5.3 *Other Constituents*—Air-entraining agents, coloring pigments, integral water repellents, finely ground silica, and other constituents, shall be previously established as suitable for use in concrete masonry and shall conform to applicable ASTM standards or shall be shown by test or experience not to

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