



Designation: C 129 – 03

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

This standard is issued under the fixed designation C 129; 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 approval. 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 the standard. The values given in parentheses are for information only.

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 weight 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, local sellers should be consulted as to the availability of units having the desired features.

### 2. Referenced Documents

#### 2.1 ASTM Standards:

- C 33 Specification for Concrete Aggregates<sup>2</sup>
- C 140 Test Methods for Sampling and Testing Concrete Masonry Units and Related Units<sup>3</sup>
- C 150 Specification for Portland Cement<sup>4</sup>
- C 207 Specification for Hydrated Lime for Masonry Purposes<sup>4</sup>
- C 331 Specification for Lightweight Aggregates for Concrete Masonry Units<sup>2</sup>

<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.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 04.02.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 04.05.

<sup>4</sup> *Annual Book of ASTM Standards*, Vol 04.01.

- C 426 Test Method for Drying Shrinkage of Concrete Masonry Units<sup>3</sup>
- C 595 Specification for Blended Hydraulic Cements<sup>4</sup>
- C 618 Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete<sup>2</sup>
- C 989 Specification for Ground Granulated Blast Furnace Slag for Use in Concrete and Mortars<sup>2</sup>
- C 1157 Performance Specification for Hydraulic Cement<sup>4</sup>
- C 1209 Terminology of Concrete Masonry Units and Related Units<sup>3</sup>
- C 1232 Terminology of Masonry<sup>3</sup>

### 3. Terminology

3.1 Terminology defined in Terminology C 1209 and Terminology C 1232 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 weight 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 C 150.
- 5.1.2 *Blended Hydraulic Cements*— Specification C 595.
- 5.1.3 *Hydraulic Cement*—Specification C 1157.
- 5.1.4 *Hydrated Lime, Type S*—Specification C 207.
- 5.1.5 *Ground Granulated Blast Furnace Slag*— Specification C 989.
- 5.1.6 *Pozzolans*—Specification C 618.

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 C 33.
- 5.2.2 *Lightweight Aggregates*—Specification C 331.

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.