

Designation: C1319 - 01 (Reapproved 2006)

Standard Specification for Concrete Grid Paving Units¹

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1. Scope*

1.1 This specification covers the requirements for concrete grid paving units for vehicular trafficways, parking areas, soil stabilization, and revetments. Maximum dimensions are 24 long by 24 in. wide (610 by 610 mm), with a minimum nominal thickness of 31/8 in. (80 mm).

Note 1—When particular features are desired, such as weight classification, higher compressive strength, surface texture, finish, color, or other special features, such properties should be specified separately by the purchaser. However, local sellers should be consulted as to availability of units having the desired features.

- 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.

2. Referenced Documents

- 2.1 ASTM Standards:²
- C33 Specification for Concrete Aggregates
- C140 Test Methods for Sampling and Testing Concrete
 Masonry Units and Related Units
 - C150 Specification for Portland Cement
 - C331 Specification for Lightweight Aggregates for Concrete Masonry Units
 - 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

C1209 Terminology of Concrete Masonry Units and Related Units³

C1232 Terminology of Masonry

3. Terminology

3.1 Terminology defined in Terminology C1209 and Terminology C1232 shall apply for this specification.

4. Materials

- 4.1 *Cementitious Materials*—Materials shall conform to the following applicable ASTM specifications:
 - 4.1.1 Portland Cements—Specification C150.
- 4.1.2 *Modified Portland Cement*—Portland cement conforming to Specification C150, modified as follows:
- 4.1.2.1 Calcium carbonate, with a minimum 85 % CaCO₃ content, shall be permitted to be interground with the cement, provided the requirements of Specification C150 as modified are met: limitation on insoluble residue is 1.5 % and limitation on loss on ignition is 7 %.
 - 4.1.3 Blended Hydraulic Cements—Specification C595.
 - 4.1.4 *Hydraulic Cement*—Specification C1157.
 - 4.1.5 *Pozzolans*—Specification C618.
- (4.1.6) Blast Furnace Slag Cements—Specification C989.
- 4.2 Aggregates—Aggregates shall conform to one of the following ASTM specifications, except that grading requirements shall not necessarily apply:
 - 4.2.1 *Normal Weight*—Specification C33.
 - 4.2.2 *Lightweight*—Specification C331.
- 4.3 Other Constituents—Air-entraining agents, coloring pigments, integral water repellents, and finely ground silica, shall be previously established as suitable for use in concrete grid paving units and shall conform to applicable ASTM standards, or they shall be shown by test or experience satisfactory to the specifier and not to be detrimental to the durability of the concrete grid paving unit or any material customarily used in grid paving construction.

5. Physical Requirements

5.1 At the time of delivery to the work site, the units shall conform to the physical requirements prescribed in Table 1.

¹ 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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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 Withdrawn. The last approved version of this historical standard is referenced on www.astm.org.