

Designation: C 1552 – 08

# Standard Practice for Capping Concrete Masonry Units, Related Units and Masonry Prisms for Compression Testing<sup>1</sup>

This standard is issued under the fixed designation C 1552; 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 ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope\*

1.1 This practice covers apparatus, materials, and procedures for capping concrete masonry units, related units, including coupons or other specimens obtained from such units, and masonry prisms for compression testing.

Note 1—The testing laboratory performing these test methods should be evaluated in accordance with Practice C 1093.

1.2 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.

1.3 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: <sup>2</sup>

- C 140 Test Methods for Sampling and Testing Concrete Masonry Units and Related Units
- C 617 Practice for Capping Cylindrical Concrete Specimens
- C 1093 Practice for Accreditation of Testing Agencies for Masonry
- C 1209 Terminology of Concrete Masonry Units and Related Units
- C 1232 Terminology of Masonry
- C 1314 Test Method for Compressive Strength of Masonry Prisms

#### 3. Terminology

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

#### 4. Significance and Use

4.1 This practice describes procedures for providing plane surfaces on the two bearing surfaces of units and prisms. The purpose of this standard is to provide consistent and standard-ized procedures for capping units and prisms for compression testing. The procedures are based on those contained (or previously contained) in Test Methods C 140, Practice C 617, and Test Method C 1314.

NOTE 2—Specimens capped using this practice will vary significantly in size and weight. Appropriate care and handling may differ based on specimen size and weight. Provide care and handling as needed to provide for proper capping based on the physical characteristics of the specimen being capped.

# 5. Apparatus

5.1 *Capping Plate*—If used, the capping plate shall be made of steel having a thickness of not less than 1 in. (25.4 mm), or a polished plate of granite or diabase at least 3 in. (76 mm) thick. The capping surface shall be plane within 0.003 in. in 16 in. (0.075 mm in 400 mm) and shall be free of gouges, grooves, and indentations greater than 0.010 in. (0.25 mm) deep or greater than 0.05 in.<sup>2</sup> (32 mm<sup>2</sup>) in surface area. At the time of capping, the capping surface shall be level within <sup>1</sup>/<sub>16</sub> in. (1.6 mm) over the length of the plate.

5.1.1 *Capping Wear Plate*—If used, the capping wear plate is placed directly on top of the capping plate and shall meet the requirements of 5.2. Do not use a capping wear plate with sulfur capping materials.

NOTE 3—A capping wear plate has been found to reduce the potential of damage to the capping plate. The capping wear plate is typically more resistant to scratches and can be replaced at less cost than that required to resurface the capping plate.

5.2 *Casting Plate*—If used, the casting plate shall be of transparent glass with a thickness of not less than  $\frac{1}{2}$  in. (13 mm). The casting plate shall be plane within 0.003 in. in 16 in. (0.075 mm in 400 mm).

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

<sup>&</sup>lt;sup>1</sup> This practice is under the jurisdiction of ASTM Committee C15 on Manufactured Masonry Units and is the direct responsibility of Subcommittee C15.04 on Research.

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<sup>&</sup>lt;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.