



Designation: C1587/C1587M – 21a

Standard Practice for Preparation of Field Removed Manufactured Masonry Units and Masonry Specimens for Testing¹

This standard is issued under the fixed designation C1587/C1587M; 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 (ε) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 The purpose of this practice is to standardize the preparation of manufactured masonry units and masonry specimens extracted from the field for compressive and flexural bond strength testing in a laboratory environment.

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The inch-pound units are shown in brackets. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

C67/C67M Test Methods for Sampling and Testing Brick and Structural Clay Tile

C140/C140M Test Methods for Sampling and Testing Concrete Masonry Units and Related Units

C1072 Test Methods for Measurement of Masonry Flexural Bond Strength

C1180 Terminology of Mortar and Grout for Unit Masonry

C1232 Terminology for Masonry

C1314 Test Method for Compressive Strength of Masonry Prisms

C1532/C1532M Practice for Selection, Removal, and Shipment of Manufactured Masonry Units and Masonry Specimens from Existing Construction

3. Terminology

3.1 *Definitions*—For definitions of terms used in this practice, refer to Terminologies C1180 and C1232.

4. Significance and Use

4.1 Masonry units and masonry specimens are sometimes removed as part of an assessment of the condition of masonry construction. This standard is intended to standardize the preparation of such units and masonry specimens for compressive and flexural bond strength testing.

NOTE 1—Masonry specimens removed from existing masonry construction (single wythe, multi-wythe or portions thereof) will sometimes contain mortar, grout, reinforcement, or accessory materials.

4.2 This practice provides information pertaining to the removal of hardened mortar, cleaning, and other special preparation required prior to compressive and flexural bond strength testing of a manufactured masonry unit or masonry specimen that has been removed from usage.

4.3 This practice does not address test procedures or the use of test results conducted on removed specimens. This practice does not determine whether removed masonry materials met original specification requirements.

NOTE 2—Compressive and flexural bond strength test results of masonry units and masonry specimens extracted from the field are expected to vary from and will likely be less than test results of masonry units that have not been placed in service or masonry prisms that have been constructed within a controlled environment. Comparison of results of tests conducted on specimens removed from service to those of masonry units prior to use or of constructed prisms is difficult. Considerable judgment is typically required for the selection and preparation of specimens removed from service.

5. Inspection of Specimens

5.1 Specimens shall be selected, removed from service, and shipped in accordance to Practice C1532/C1532M.

¹ 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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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.

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