



Standard Practice for Sampling and the Amount of Testing of Hydraulic Cement¹

This standard is issued under the fixed designation C 183; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This practice covers procedures for sampling and for the amount of testing of hydraulic cement after it has been manufactured and is ready to be offered for sale.

1.2 The values stated in SI units are to be regarded as the standard. The inch-pound units in parentheses are for information purposes only.

1.2.1 A ton as used in this practice is 907 kg (2000 lb).

1.2.2 Values in SI units shall be obtained by measurement in SI units or by appropriate conversion, using the Rules for Conversion and Rounding given in Standard IEEE/ASTM SI 10, of measurement made in other units.

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:

C 91 Specification for Masonry Cement²

C 109/C 109M Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or 50-mm Cube Specimens)²

C 114 Test Methods for Chemical Analysis of Hydraulic Cement²

C 115 Test Method for Fineness of Portland Cement by the Turbidimeter²

C 150 Specification for Portland Cement²

C 151 Test Method for Autoclave Expansion of Portland Cement²

C 157/C 157M Test Method for Length Change of Hardened Hydraulic-Cement Mortar and Concrete³

C 185 Test Method for Air Content of Hydraulic Cement Mortar²

C 186 Test Method for Heat of Hydration of Hydraulic Cement²

C 191 Test Method for Time of Setting of Hydraulic Cement by Vicat Needle²

C 204 Test Method for Fineness of Hydraulic Cement by Air-Permeability Apparatus²

C 227 Test Method for Potential Alkali Reactivity of Cement-Aggregate Combinations (Mortar-Bar Method)³

C 265 Test Method for Water-Extractable Sulfate in Hydrated Hydraulic Cement Mortar²

C 266 Test Method for Time of Setting of Hydraulic-Cement Paste by Gillmore Needles²

C 451 Test Method for Early Stiffening of Hydraulic Cement (Paste Method)²

C 452 Test Method for Potential Expansion of Portland-Cement Mortars Exposed to Sulfate²

C 563 Test Method for Optimum SO_3 in Hydraulic Cement Using 24-h Compressive Strength²

C 595 Specification for Blended Hydraulic Cements²

C 845 Specification for Expansive Hydraulic Cement²

C 1012 Test Method for Length Change of Hydraulic-Cement Mortars Exposed to a Sulfate Solution²

C 1157 Performance Specification for Hydraulic Cement²

C 1328 Specification for Plastic (Stucco) Cement²

C 1329 Specification for Mortar Cement²

E 11 Specification for Wire-Cloth and Sieves for Testing Purposes⁴

IEEE/ASTM SI 10 Standard for Use of the International System of Units (SI): The Modern Metric System⁵

2.2 ACI Standard:

225.1R Guide to the Selection and Use of Hydraulic Cements⁶

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

¹ This practice is under the jurisdiction of ASTM Committee C01 on Cement, and is the direct responsibility of Subcommittee C01.95 on Coordination of Standards.

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² Annual Book of ASTM Standards, Vol 04.01.

³ Annual Book of ASTM Standards, Vol 04.02.

⁴ Annual Book of ASTM Standards, Vol 14.02.

⁵ Annual Book of ASTM Standards, Vol 14.04.

⁶ Detailed requirements for this sieve are given in Specification E 11.