



Standard Specification for Processing Additions for Use in the Manufacture of Hydraulic Cements¹

This standard is issued under the fixed designation C465; 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 This specification pertains to the criteria and tests to be used for determining whether a(n) organic or inorganic processing addition, when used in the recommended amount at the option of the cement producer in the manufacture of hydraulic cements, meets the requirements as prescribed by definition in Specifications C150, C1157, C845, and C595. The materials listed in the following former ASTM Specifications shall be considered as meeting the organic processing additions requirements of this specification:

C150 – 62, for Portland Cement
C205 – 58 T, for Portland Blast-Furnace Slag Cement
C340 – 58 T, for Portland Pozzolan Cement
C358 – 58, for Slag Cement

1.2 The following safety hazards caveat pertains only to the test methods described in this specification. *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.*

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

2. Referenced Documents

2.1 ASTM Standards:²

C33 Specification for Concrete Aggregates
C39/C39M Test Method for Compressive Strength of Cylindrical Concrete Specimens
C78 Test Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
C109/C109M Test Method for Compressive Strength of

Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)

C114 Test Methods for Chemical Analysis of Hydraulic Cement

C115 Test Method for Fineness of Portland Cement by the Turbidimeter

C138/C138M Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete

C143/C143M Test Method for Slump of Hydraulic-Cement Concrete

C150 Specification for Portland Cement

C151 Test Method for Autoclave Expansion of Hydraulic Cement

C173/C173M Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method

C185 Test Method for Air Content of Hydraulic Cement Mortar

C187 Test Method for Amount of Water Required for Normal Consistency of Hydraulic Cement Paste

C191 Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle

C192/C192M Practice for Making and Curing Concrete Test Specimens in the Laboratory

C204 Test Methods for Fineness of Hydraulic Cement by Air-Permeability Apparatus

C205 Specification for Portland Blast-Furnace Cement; Replaced by C 595 (Withdrawn 1967)³

C226 Specification for Air-Entraining Additions for Use in the Manufacture of Air-Entraining Hydraulic Cement

C231 Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method

C293 Test Method for Flexural Strength of Concrete (Using Simple Beam With Center-Point Loading)

C340 Specification for Corkboard Thermal Insulation; Replaced by C 640 (Withdrawn 1967)³

C358 Specification for Slag Cement; Replaced by C 595 (Withdrawn 1967)³

C595 Specification for Blended Hydraulic Cements

C596 Test Method for Drying Shrinkage of Mortar Containing Hydraulic Cement

¹ This specification is under the jurisdiction of ASTM Committee C01 on Cement and is the direct responsibility of Subcommittee C01.20 on Additions.

Current edition approved April 15, 2016. Published April 2016. Originally approved in 1961. Last previous edition approved in 2010 as C465–10. DOI: 10.1520/C0465-16.

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