



Designation: C1707 – 18

# Standard Specification for Pozzolan Hydraulic Lime for Structural Purposes<sup>1</sup>

This standard is issued under the fixed designation C1707; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This standard covers four types of pozzolan hydraulic lime for structural purposes which include use in mortar, scratch, brown, and finish (stucco) coats of interior or exterior plaster.

1.1.1 *PHL*—Pozzolan hydraulic lime for use in mortar, scratch, brown, and finish (stucco) coats of interior or exterior plaster.

1.1.2 *PHL<sub>c</sub>*—*PHL* with a maximum 20 % binder weight of hydraulic cement.

1.1.3 *PHL-A*—Air-entrained *PHL*.

1.1.4 *PHL<sub>c</sub>-A*—Air-entrained *PHL<sub>c</sub>*.

1.2 The values stated in SI units are to be regarded as standard.

1.3 This specification classifies pozzolan hydraulic lime by minimum hydrated lime content, maximum hydraulic cement content, and specific performance requirements.

1.4 *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.*

1.5 *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*:<sup>2</sup>

**C25** Test Methods for Chemical Analysis of Limestone, Quicklime, and Hydrated Lime

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee C07 on Lime and Limestone and is the direct responsibility of Subcommittee C07.02 on Specifications and Guidelines.

Current edition approved Oct. 1, 2018. Published November 2018. Originally approved in 2009. Last previous edition approved in 2011 as C1707 – 11. DOI: 10.1520/C1707-18.

<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.

**C50/C50M** Practice for Sampling, Sample Preparation, Packaging, and Marking of Lime and Limestone Products

**C51** Terminology Relating to Lime and Limestone (as Used by the Industry)

**C109/C109M** Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50 mm] Cube Specimens)

**C110** Test Methods for Physical Testing of Quicklime, Hydrated Lime, and Limestone

**C114** Test Methods for Chemical Analysis of Hydraulic Cement

**C150/C150M** Specification for Portland Cement

**C207** Specification for Hydrated Lime for Masonry Purposes

**C266** Test Method for Time of Setting of Hydraulic-Cement Paste by Gillmore Needles

**C270** Specification for Mortar for Unit Masonry

**C305** Practice for Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency

**C511** Specification for Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes

**C595/C595M** Specification for Blended Hydraulic Cements

**C778** Specification for Standard Sand

**C1157/C1157M** Performance Specification for Hydraulic Cement

## 3. Terminology

3.1 *Definitions*:

3.1.1 Unless otherwise specified, for definitions of terms used in this standard see Terminology **C51**.

3.1.2 *air entraining pozzolan hydraulic lime (PHL-A), n*—as *PHL* with the exception that Type SA hydrated lime of Specification **C207**, or Type NA of Specification **C207** shall be used if shown not detrimental to the soundness of the material. If Type SA or Type NA hydrated limes are used, an additional air entraining agent shall not be used.

3.1.3 *air entraining pozzolan hydraulic lime with hydraulic cement (PHL<sub>c</sub>-A), n*—as *PHL<sub>c</sub>* with exception that Type SA hydrated lime of Specification **C207** shall be used, or Type NA of Specification **C207** shall be used if shown not detrimental to the soundness of the material. If Type SA or Type NA hydrated limes are used, an additional air entraining agent shall not be used.