



Designation: C207 – 18

# Standard Specification for Hydrated Lime for Masonry Purposes<sup>1</sup>

This standard is issued under the fixed designation C207; 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.

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

## 1. Scope

1.1 This specification covers four types of hydrated lime. Types N and S are suitable for use in mortar, in scratch and brown coats of cement plaster, for stucco, and for addition to portland-cement concrete. Types NA and SA are air-entrained hydrated limes that are suitable for use in any of the above uses where the inherent properties of lime and air-entrainment are desired. The four types of lime sold under this specification shall be designated as follows:

1.1.1 *Type N*—Normal hydrated lime for masonry purposes.

1.1.2 *Type S*—Special hydrated lime for masonry purposes.

1.1.3 *Type NA*—Normal air-entraining hydrated lime for masonry purposes.

1.1.4 *Type SA*—Special air-entraining hydrated lime for masonry purposes.

NOTE 1—Type S, special hydrated lime, and Type SA, special air-entraining hydrated lime, are differentiated from Type N, normal hydrated lime, and Type NA, normal air-entraining hydrated lime, principally by their ability to develop high, early plasticity and higher water retentivity, and by a limitation on their unhydrated oxide content.

NOTE 2—For normal (Type N) and special (Type S) finishing hydrated lime, refer to Specification C206.

NOTE 3—Some building codes prohibit the use of air-entraining materials in mortar, because of the accompanying reduction in bond and compressive strength. Where increased freeze-thaw resistance is important, air-entraining may be beneficial. Air-entraining lime should not be used as a finishing lime.

NOTE 4—For lime putty, refer to Specification C1489.

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

*ization 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

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

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

C206 Specification for Finishing Hydrated Lime

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

C778 Specification for Standard Sand

C1489 Specification for Lime Putty for Structural Purposes

## 3. Terminology

3.1 *Definitions:*

3.1.1 *standard mortar, n*—a mortar containing only hydrated lime and sand meeting the requirements of Specification C778. The mortar proportions are one part hydrated lime to three parts of sand by volume as indicated in Table 4 of Test Methods C110.

## 4. Additions

4.1 Types NA and SA hydrated lime covered by this specification shall contain additives for the purpose of entraining air, and such additives shall conform to the requirements of Specification C226.

## 5. Manufacturer's Statement

5.1 At the request of the purchaser, the manufacturer shall state in writing the nature, amount, and identity of the air-entraining agent used and of any processing addition that may have been used, and also, if requested, shall supply test

<sup>1</sup> This specification 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 1946. Last previous edition approved in 2011 as C207 – 06 (2011). DOI: 10.1520/C0207-18.

<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.