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.



Designation: C206 - 14 (Reapproved 2022)

# Standard Specification for Finishing Hydrated Lime<sup>1</sup>

This standard is issued under the fixed designation C206; 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 ( $\varepsilon$ ) 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 two types of finishing hydrated lime that are suitable for use in the scratch, brown, and finish coats of plaster, for stucco, for mortar, and as an addition to portland-cement concrete. The two types of lime sold under this specification shall be designated as follows:

1.1.1 Type N—Normal hydrated lime for finishing purposes, and

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

Note 1—Type N, normal finishing hydrated lime, is differentiated from Type S, special finishing hydrated lime, in that no limitation on the amount of unhydrated oxides is specified for Type N hydrate, and the plasticity requirement for Type N hydrate shall be determined after soaking for 16 to 24 h.

NOTE 2—For lime putty, refer to Specification C1489.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 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

C50 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)
- C110 Test Methods for Physical Testing of Quicklime, Hydrated Lime, and Limestone
- C842 Specification for Application of Interior Gypsum Plaster
- C1271 Test Method for X-ray Spectrometric Analysis of Lime and Limestone
- C1301 Test Method for Major and Trace Elements in Limestone and Lime by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP) and Atomic Absorption (AA)

#### 3. Terminology

3.1 *Definitions*—For definitions of terms relating to hydrated lime, refer to Terminology C51.

#### 4. Chemical Composition

4.1 Hydrated lime for finishing purposes shall conform to the following requirements as to chemical composition:

	Type N	Type S
Calcium and magnesium oxides (LOI-free basis),	95	95
min, %		
Carbon dioxide (as-received basis), max, %		
If sample is taken at the place of manufacture	5	5
If sample is taken at any other place	7	7
Unhydrated oxides (as-received basis), max, %		8

#### 5. Residue

5.1 The percentage residue of finishing hydrated lime shall conform to the following requirements:

Residue retained on 600 $\mu m$ (No. 30) sieve, max, $\%$	0.5
Residue retained on 75 $\mu m$ (No. 200) sieve, max, $\%$	15

#### 6. Popping and Pitting

6.1 Finishing hydrated lime shall show no pops or pits when tested in accordance with the method prescribed in 10.1.2.

#### 7. Plasticity

7.1 The putty made from Type N, normal finishing hydrated lime, shall have a plasticity figure of not less than 200 when soaked for a period of not less than 16 h nor more than 24 h.

<sup>&</sup>lt;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.

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<sup>&</sup>lt;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.

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7.2 The putty made from Type S, special finishing hydrated lime, shall have a plasticity figure of not less than 200 when tested commencing within 30 min after mixing with water.

#### 8. Application of Interior Gypsum Plaster

8.1 For recommended application procedures refer to Specification C842.

#### 9. Sampling, Inspection, and so forth

9.1 The sampling, inspection, rejection, retesting, packing, and marking shall be conducted in accordance with Methods C50.

#### 10. Test Methods

10.1 The properties enumerated in this specification shall be determined in accordance with the following methods:

10.1.1 *Chemical Analysis*—Test Methods C25 or, for total calcium and magnesium oxides, Test Methods C1271 or C1301.

10.1.2 Physical Tests—Test Methods C110.

## 11. Package Marking

11.1 Type N hydrated lime, in bags, conforming to this specification, shall be soaked for a minimum of 16 h prior to use.

### 12. Keywords

12.1 finishing lime; masonry; plaster; plasticity; popping and pitting; residue; Type N; Type S; unhydrated oxides

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