

Designation: C 1180 - 03a

## Standard Terminology of Mortar and Grout for Unit Masonry<sup>1</sup>

This standard is issued under the fixed designation C 1180; 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 terminology contains terms, definitions of terms, descriptions of terms, nomenclature, and explanations of abbreviations, acronyms, and symbols specifically associated with standards under the jurisdiction of ASTM Committee C12 on Mortars for Unit Masonry.

1.2 The definitions and descriptions of terms in this terminology pertain to Test Methods C 780, C 952, C 1019, and C 1148 and Specifications C 144, C 270, C 404, C 476, C 887, C 1142, and C 1384.

## 2. Referenced Documents

- 2.1 ASTM Standards: <sup>2</sup>
- C 144 Specification for Aggregate for Masonry Mortar
- C 270 Specification for Mortar for Unit Masonry
- C 404 Specification for Aggregates for Masonry Grout
- C 476 Specification for Grout for Masonry
- C 780 Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
- C 887 Specification for Packaged, Dry, Combined Materials for Surface Bonding Mortar
- C 952 Test Method for Bond Strength of Mortar to Masonry Units
- C 1019 Test Method of Sampling and Testing Grout
- C 1142 Specification for Extended Life Mortar for Unit Masonry
- C 1148 Test Method for Measuring the Drying Shrinkage of Masonry Mortar
- C 1384 Specification for Modifiers for Masonry Mortars

## 3. Terminology

3.1 Definitions:

admixed mortar, *n*—masonry mortar that deviates from those

combinations of materials recognized by Specification C 270 in that it also contains an admixture. C 1384

admixture, *n*—substance other than the Specification C 270 prescribed materials of water, aggregate, and cementitious materials that is added to a masonry mortar as an ingredient to improve one or more chemical or physical properties of the conventional masonry mortar.

C 1384

**aggregates,** *n*—a granular mineral material such as natural sand, manufactured sand, gravel, crushed stone, and air cooled blast furnace slag.

**bond enhancer,** *n*—admixture incorporated into a masonry mortar to increase the bond strength between the mortar and the masonry unit.

C 1384

**Cementitious material,** *n*—Committee C12 standards for mortar and grout consider the following as cementitious materials: Hydraulic cements, pozzolans, hydrated lime, lime putty, and ground granulated blast furnance slag.

Discussion—Hydraulic cements (such as portland cement, blended cement, masonry cement, and mortar cement) react with water to harden and will do so under water. Pozzolans (such as coal fly ash, raw or calcined natural pozzolans) react with lime in the presence of moisture. Hydrated lime and lime putty react with carbon dioxide from the air. Ground granulated blast furnance slag, blended cements, and some pozzolans may exhibit both hydraulic and pozzolanic properties.

**compressive strength,** *n*—the maximum compressive load which a specimen will support divided by the cross sectional area of the specimen.

**durability**, *n*—the ability of a material to resist weathering action, chemical attack, abrasion, and other conditions of service.

**flow**, *n*—a laboratory measured mortar property that indicates the percent increase in diameter of the base of the truncated cone of mortar when it is placed on a flow table, and mechanically raised and dropped specified times under specified conditions.

**gradation,** *n*—the particle size distribution of aggregate as determined by separation with standard screens. Gradation of aggregate is expressed in terms of the individual percentages passing standard screens. Sieve analysis and screen analysis are synonyms when referring to gradation of aggregate.

**grout,** *n*—a mixture of cementitious materials, aggregates, water, with or without admixtures, initially produced to

<sup>&</sup>lt;sup>1</sup> This terminology is under the jurisdiction of ASTM Committee C12 on Mortars and Grouts for Unit Masonry and is the direct responsibility of Subcommittee C12.08 on Terminology.

Current edition approved Sept. 10, 2003. Published November 2003. Originally approved in 1991. Last previous edition approved in 2003 as C 1180–03.

<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.