



Standard Terminology Relating to Concrete and Concrete Aggregates¹

This standard is issued under the fixed designation C 125; 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.

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

1. Scope

1.1 The following definitions apply to hydraulic cement concrete, although some of them may have wider application.²

2. Referenced Documents

2.1 ASTM Standards:

C 109/C 109M Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or 50-mm Cube Specimens)³

C 143/C 143M Test Method for Slump of Hydraulic Cement Concrete⁴

C 403/C 403M Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance⁴

C 494/ 494M Specification for Chemical Admixtures for Concrete⁴

C 939 Test Method for Flow of Grout for Preplaced-Aggregate Concrete (Flow Cone Method)⁴

C 1074 Practice for Estimating Concrete Strength by the Maturity Method⁴

3. Terminology

absorption, *n*—the process by which a liquid is drawn into and tends to fill permeable pores in a porous solid body; also, the increase in mass of a porous solid body resulting from the penetration of a liquid into its permeable pores.

DISCUSSION—In the case of concrete and concrete aggregates, unless otherwise stated, the liquid involved is water, the increase in mass is that which does not include water adhering to the outside surface, the increase in mass is expressed as a percentage of the dry mass of the body and the body is considered to be “dry” when it has been treated by an appropriate process to remove uncombined water, such as drying to constant mass at a temperature between 100 and 110°C.

admixture, *n*—a material other than water, aggregates, hydraulic cementitious material, and fiber reinforcement that is

used as an ingredient of a cementitious mixture to modify its freshly mixed, setting, or hardened properties and that is added to the batch before or during its mixing.

accelerating admixture, *n*—admixture that accelerates the setting and early strength development of concrete. (C 494/ 494M)

air-entraining admixture, *n*—admixture that causes the development of a system of microscopic air bubbles in concrete or mortar during mixing.

chemical admixture, *n*—a nonpozzolanic admixture in the form of a liquid, suspension, or water-soluble solid.

mineral admixture, *n*—deprecated term.

DISCUSSION—This term has been used to refer to different types of water insoluble, finely divided materials such as pozzolanic materials, cementitious materials, and aggregate. These materials are not similar, and it is not useful to group them under a single term. The name of the specific material should be used, for example, use “pozzolan,” “ground granulated blast-furnace slag,” or “finely divided aggregate,” as is appropriate.

retarding admixture, *n*—admixture that retards the setting of concrete. (C 494/ 494M)

water-reducing admixture, *n*—admixture that either increases the slump of freshly mixed mortar or concrete without increasing the water content or that maintains the slump with a reduced amount of water due to factors other than air entrainment.

aggregate, *n*—granular material, such as sand, gravel, crushed stone, or iron blast-furnace slag, used with a cementing medium to form hydraulic-cement concrete or mortar.

coarse aggregate, *n*—(1) aggregate predominantly retained on the 4.75-mm (No. 4) sieve; or (2) that portion of an aggregate retained on the 4.75-mm (No. 4) sieve.

DISCUSSION—The definitions are alternatives to be applied under differing circumstances. Definition (1) is applied to an entire aggregate either in a natural condition or after processing. Definition (2) is applied to a portion of an aggregate. Requirements for properties and grading should be stated in the specification.

fine aggregate, *n*—(1) aggregate passing the 3/8-in. (9.5-mm) sieve and almost entirely passing the 4.75-mm (No. 4) sieve and predominantly retained on the 75- μ m (No. 200) sieve; or (2) that portion of an aggregate passing the 4.75-mm (No. 4) sieve and retained on the 75- μ m (No. 200) sieve.

DISCUSSION—The definitions are alternatives to be applied under

¹ This terminology is under the jurisdiction of ASTM Committee C09 on Concrete and Concrete Aggregates and is the direct responsibility of Subcommittee C09.91 on Editorial and Terminology.

Current edition approved Sept. 10, 2000. Published October 2000. Originally published as C 125 – 36 T. Last previous edition C 125 – 00.

² C 219, Terminology Relating to Hydraulic Cement contains definitions of a number of items in use in standards under the jurisdiction of Committee C-9. Definitions of additional terms may be found in *Cement and Concrete Terminology*, 116R American Concrete Institute, P.O. Box 19150, Detroit, MI 48219.

³ *Annual Book of ASTM Standards*, Vol 04.01.

⁴ *Annual Book of ASTM Standards*, Vol 04.02.