



Designation: C897 – 05(Reapproved 2009)

Standard Specification for Aggregate for Job-Mixed Portland Cement-Based Plasters¹

This standard is issued under the fixed designation C897; 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.

1. Scope

1.1 This specification covers natural or manufactured aggregate for use in job-mixed base and finish-coat full thickness portland cement, portland cement-lime and modified portland cement plasters.

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 The text of this specification references notes and footnotes that provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

2. Referenced Documents

2.1 *ASTM Standards*:²

C11 Terminology Relating to Gypsum and Related Building Materials and Systems

C40 Test Method for Organic Impurities in Fine Aggregates for Concrete

C87 Test Method for Effect of Organic Impurities in Fine Aggregate on Strength of Mortar

C88 Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate

C117 Test Method for Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing

C123 Test Method for Lightweight Particles in Aggregate

C125 Terminology Relating to Concrete and Concrete Aggregates

C136 Test Method for Sieve Analysis of Fine and Coarse Aggregates

C142 Test Method for Clay Lumps and Friable Particles in Aggregates

¹ This specification is under the jurisdiction of ASTM Committee C11 on Gypsum and Related Building Materials and Systems and is the direct responsibility of Subcommittee C11.02 on Specifications and Test Methods for Accessories and Related Products.

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² 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.

D75 Practice for Sampling Aggregates

3. Terminology

3.1 *Definitions*—Definitions used in this standard shall be in accordance with Terminologies C11 and C125.

3.2 *Definitions of Terms Specific to This Standard*:

3.2.1 *aggregate, n*—a granular material such as natural or manufactured sand used with a cementing medium to form plaster (stucco).

3.2.2 *manufactured sand, n*—the fine material resulting from the crushing and classification by screening, or otherwise, of rock, gravel, or blast furnace slag.

3.2.3 *natural sand, n*—the fine granular material resulting from the natural disintegration of rock.

4. Composition

4.1 *Deleterious Substances*—The amount of deleterious substances in aggregates, each determined on independent samples complying with the grading requirements of Section 6, shall not be more than the following:

| Item | Maximum Permissible Weight, % |
|---|-------------------------------|
| Friable particles | 1.0 |
| Light weight particles, floating on liquid having a specific gravity of 2.0 | 0.5 |

4.2 *Organic Impurities*:

4.2.1 The aggregate shall be free of injurious amounts of organic impurities. Except as herein provided, aggregates subjected to the test for Organic Impurities, Test Method C40, and producing a color darker than the standard shall be rejected.

4.2.2 Aggregate failing the test for organic impurities may be used provided that, when tested for the effect of organic impurities on strength in accordance with Test Method C87, the relative strength at 7 days is not less than 95 %.

5. Physical Properties

5.1 *Soundness* (see 7.1.7):

5.1.1 Except as herein provided, aggregate subjected to five cycles of the soundness test shall show a loss, when weighed in accordance with the grading of a sampling complying with the