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Standard Specification for Fine Aggregate for Bituminous Paving Mixtures¹

This standard is issued under the fixed designation D1073; 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 This specification covers fine aggregate for use in bituminous paving mixtures.

1.2 This specification is intended to describe material from a single source. When material from two or more sources is to be blended to produce a grading to meet requirements in other specifications for bituminous paving mixtures, the grading requirements of **Table 1** of this specification are not applicable.

NOTE 1—When obtaining materials from two or more sources that are to be blended to produce the final mix, it is recommended that the specifying or the ordering agency specify the alternative gradings and blend ratios to be supplied.

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard. Sieve numbers shown in the text and **Table 1** are labels only and are included for ease of reference of the user of this standard.

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

2. Referenced Documents

2.1 *ASTM Standards*:²

- 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
- C125 Terminology Relating to Concrete and Concrete Aggregates
- C136 Test Method for Sieve Analysis of Fine and Coarse Aggregates

¹ This specification is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.50 on Aggregate Specifications.

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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.

- C294 Descriptive Nomenclature for Constituents of Concrete Aggregates
- D8 Terminology Relating to Materials for Roads and Pavements
- D75 Practice for Sampling Aggregates
- D3665 Practice for Random Sampling of Construction Materials
- D4318 Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

3. Terminology

3.1 *Definitions*:

3.1.1 For defining aggregate types, see Descriptive Nomenclature C294, and Terminology D8 and C125.

3.1.2 *expanded shale, n; expanded clay, n; expanded slate, n*; the product resulting from the expanding of selected materials (shale, clay, or slate) in a rotary kiln at temperatures over 1000°C.

4. Ordering Information

4.1 Orders for material under this specification shall include the following:

4.1.1 This specification designation including year,

4.1.2 Grading (6.2 and **Table 1**), or alternative grading designated by the purchaser,

4.1.3 Supplementary requirement for sulfate soundness, if required, including salt to be used (See S1), and

4.1.4 Any exceptions or additions to this specification.

5. General Characteristics

5.1 Fine aggregate is aggregate passing the 9.5-mm ($\frac{3}{8}$ -in.) sieve and almost entirely passing the 4.75-mm (No. 4) sieve. It shall consist of natural sand; or of manufactured fine aggregate from crushed stone, crushed blast-furnace slag, or crushed gravel; or crushed or uncrushed expanded shale, expanded clay, or expanded slate; or combinations thereof. It shall consist of hard, tough grains, free of injurious amounts of clay, loam, or other deleterious substances.