



Designation: D1139/D1139M – 09

# Standard Specification for Aggregate for Single or Multiple Bituminous Surface Treatments<sup>1</sup>

This standard is issued under the fixed designation D1139/D1139M; 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.

*This standard has been approved for use by agencies of the Department of Defense. This specification replaces Federal Specification SS-S-445, Class C, Types I, II, and III.*

## 1. Scope

1.1 This specification covers the quality and sizes of crushed stone, crushed slag, crushed expanded shale, crushed expanded clay, crushed expanded slate, and crushed or uncrushed gravel suitable for use as aggregate in single or multiple bituminous surface treatments.

1.2 The values in SI units are to be regarded as standard. Inch-pound units, shown in parentheses, are for information only.

1.3 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.

1.4 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.4.1 Regarding sieves, per Specification E11 “The values stated in SI units shall be considered standard for the dimensions of the wire cloth openings and the diameter of the wires used in the wire cloth. The values stated in inch-pound units shall be considered standard with regard to the sieve frames.” When sieve mesh sizes are referenced, the alternate inch-pound designations are provided for information purposes and enclosed in parentheses.

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>2</sup>

<sup>1</sup> 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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<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.

- C29/C29M Test Method for Bulk Density (“Unit Weight”) and Voids in Aggregate
- C88 Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
- C123 Test Method for Lightweight Particles in Aggregate
- C125 Terminology Relating to Concrete and Concrete Aggregates
- C131 Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
- C136 Test Method for Sieve Analysis of Fine and Coarse Aggregates
- C142 Test Method for Clay Lumps and Friable Particles in Aggregates
- D8 Terminology Relating to Materials for Roads and Pavements
- D75 Practice for Sampling Aggregates
- D448 Classification for Sizes of Aggregate for Road and Bridge Construction
- D3665 Practice for Random Sampling of Construction Materials
- D4791 Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
- D5821 Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
- E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves

## 3. Terminology

### 3.1 Definitions of Terms Specific to This Standard:

3.1.1 Other terms used in this specification are defined in Terminologies C125 and D8.

3.1.2 *crushed slag, n*—the product resulting from the crushing of air-cooled iron blast-furnace slag.

3.1.3 *gravel, n*—the product resulting from natural disintegration and abrasion of rock or processing of weakly bound conglomerate.

3.1.4 *uncrushed gravel, n*—the product resulting from screening and blending of material from the deposit, consisting of particles with a shape and texture largely dependent on the