



Designation: D5106 – 13

Standard Specification for Steel Slag Aggregates for Bituminous Paving Mixtures¹

This standard is issued under the fixed designation D5106; 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 crushed steel slag coarse and fine aggregates suitable for use in bituminous paving mixtures.

1.2 Steel slag coarse and fine aggregates are currently being used entirely (**Note 1**) or combined with other mineral aggregates, such as those covered in Specification **D692** or **D1073**, to produce paving mixtures similar to those described in Specification **D3515** or **D4215**.

NOTE 1—When 100 % of the coarse aggregate in a bituminous mixture is steel slag, the amount of steel slag fines in that mixture may be limited to prevent bulking.

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

NOTE 2—Sieve size is identified by its standard designation in Specification **E11**. The alternative designation given in parentheses is for information only and does not represent a different standard sieve size.

1.4 The text of this specification 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
- C131** Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

¹ The 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.

- 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
 - D692** Specification for Coarse Aggregate for Bituminous Paving Mixtures
 - D1073** Specification for Fine Aggregate for Bituminous Paving Mixtures
 - D3319** Practice for the Accelerated Polishing of Aggregates Using the British Wheel
 - D3515** Specification for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures (Withdrawn 2009)³
 - D3665** Practice for Random Sampling of Construction Materials
 - D4215** Specification for Cold-Mixed, Cold-Laid Bituminous Paving Mixtures
 - D4318** Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
 - D4792** Test Method for Potential Expansion of Aggregates from Hydration Reactions
 - D4867/D4867M** Test Method for Effect of Moisture on Asphalt Concrete Paving Mixtures
 - D5711** Test Method for Determining the Adherent Coating on Coarse Aggregates (Withdrawn 2012)³
 - D5821** Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
 - E11** Specification for Woven Wire Test Sieve Cloth and Test Sieves
- 2.2 *Federal Registrar*:⁴
- SW846 1311** EPA Test Method, Toxicity Characteristic Leaching Procedure

3. Terminology

3.1 *Definitions of Terms Specific to This Standard*:

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from the Department of Commerce, National Technical Information Center, 5285 Port Royal Road, Springfield, VA 22151. Order Number: EPAW-846.3.3.