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Standard Specification for Mineral Filler For Bituminous Paving Mixtures¹

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1. Scope

1.1 This specification covers mineral filler added as a separate ingredient for use in bituminous paving mixtures.

1.2 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.

1.3 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.

2. Referenced Documents

2.1 *ASTM Standards*:²

- [C50 Practice for Sampling, Sample Preparation, Packaging, and Marking of Lime and Limestone Products](#)
- [C183 Practice for Sampling and the Amount of Testing of Hydraulic Cement](#)
- [C311 Test Methods for Sampling and Testing Fly Ash or Natural Pozzolans for Use in Portland-Cement Concrete](#)
- [D546 Test Method for Sieve Analysis of Mineral Filler for Bituminous Paving Mixtures](#)

[D4318 Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils](#)

3. General Description

3.1 Mineral filler shall consist of finely divided mineral matter such as rock dust, slag dust, hydrated lime, hydraulic cement, fly ash, loess, or other suitable mineral matter. At the time of use, it shall be sufficiently dry to flow freely and essentially free from agglomerations.

4. Physical Requirements

4.1 Mineral filler shall be graded within the following limits:

Sieve	Percent Passing (by Mass)
1.18 mm [No. 16]	100
600- μ m [No. 30]	97 to 100
300- μ m [No. 50]	95 to 100
75- μ m [No. 200]	70 to 100

4.2 Mineral Filler prepared from rock dust, slag dust, loess, and similar materials shall be essentially free from organic impurities and have a plasticity index not greater than 4.

NOTE 1—Plasticity index limits are not appropriate for hydrated lime and hydraulic cement.

5. Methods of Sampling and Testing

5.1 Sample the mineral filler according to Practice [C50](#), [C183](#), or Test Methods [C311](#), whichever is most appropriate for the material being sampled, except as noted in [5.1.1](#).

5.1.1 Obtain samples at random intervals not to exceed each 300 tons of material as delivered.

5.2 The minimum size of field samples shall be 5.0 kg [11 lbs]. Reduce the field sample to a minimum size of 2.5 kg [5 lbs] for testing.

5.3 Determine the grading of the material by Test Method [D546](#).

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.