

Designation: D979/D979M - 12

StandardPractice for Sampling Bituminous Paving Mixtures¹

This standard is issued under the fixed designation D979/D979M; 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 practice covers sampling of bituminous paving mixtures at points of manufacture, storage, delivery, or in place.
- 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 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

2.1 ASTM Standards:²

C702 Practice for Reducing Samples of Aggregate to Testing Size

D2041 Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures

D2234/D2234M Practice for Collection of a Gross Sample of Coal

D2726 Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures

D3665 Practice for Random Sampling of Construction Materials

D5361 Practice for Sampling Compacted Bituminous Mixtures for Laboratory Testing

D5444 Test Method for Mechanical Size Analysis of Extracted Aggregate

¹ This practice is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and are the direct responsibility of Subcommittee D04.30 on Methods of Sampling.

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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.

D6307 Test Method for Asphalt Content of Hot-Mix Asphalt by Ignition Method

D6925 Test Method for Preparation and Determination of the Relative Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor

D6926 Practice for Preparation of Bituminous Specimens Using Marshall Apparatus

D6927 Test Method for Marshall Stability and Flow of Bituminous Mixtures

E105 Practice for Probability Sampling of Materials

E122 Practice for Calculating Sample Size to Estimate, With Specified Precision, the Average for a Characteristic of a Lot or Process

E141 Practice for Acceptance of Evidence Based on the Results of Probability Sampling

3. Terminology

- 3.1 Definitions of Terms Specific to This Standard:
- 3.1.1 *field sample*, *n*—a quantity of the material to be tested of sufficient size to provide an acceptable estimate of the average quality of a unit.
 - 3.1.2 *increment*, *n*—part of a sample.
- -3.1.3 *lot*, *n*—a sizable isolated quantity of bulk material from a single source, assumed to have been produced by the same process (for example, a day's production or a specific mass or volume).
- 3.1.4 *test portion, n*—a quantity of the material of sufficient size extracted from the larger field sample by a procedure designed to ensure accurate representation of the field sample, and thus of the unit sampled.
- 3.1.5 *unit*, *n*—a batch or finite subdivision of a lot of bulk material (for example, a truck load or a specific area covered).

4. Significance and Use

- 4.1 General:
- 4.1.1 Sampling is equally as important as the testing, and the sampler shall take every precaution to obtain samples that will yield an acceptable estimate of the nature and conditions of the materials which they represent.
- 4.1.2 Samples for the development of preliminary data are obtained by the party responsible for the development of the data. Samples for control of the product at the source of manufacture or storage, or at the site of use, are obtained by the