



Standard Practice for Sampling Bituminous Paving Mixtures¹

This standard is issued under the fixed designation D 979; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

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 *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.*

1.3 The values stated in SI units are to be regarded as the standard. The values in parentheses are provided for information purposes only.

2. Referenced Documents

2.1 ASTM Standards:

C 702 Practice for Reducing Field Samples of Aggregate to Testing Size²

D 2234 Test Method for Collection of a Gross Sample of Coal³

D 3665 Practice for Random Sampling of Construction Materials⁴

E 105 Practice for Probability Sampling of Materials⁵

E 122 Practice for Choice of Sample Size to Estimate a Measure of Quality for a Lot or Process⁵

E 141 Practice for Acceptance of Evidence Based on the Results of Probability Sampling⁵

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 of 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 manufacturer, contractor, or other parties responsible for accomplishing the work. Samples for tests to be used in acceptance or rejection decisions by the purchaser are obtained by the purchaser or his authorized representative.

5. Procedure

5.1 *Inspection*—The material shall be inspected to determine discernible variations. The seller shall provide equipment needed for safe and appropriate inspection and sampling.

5.2 *Sampling*—The procedures for selecting locations or times for sampling are described in Practice D 3665.

5.2.1 *Sampling from a Conveyor Belt*—Stop the conveyor belt. Randomly select at least three areas of approximately equal size on the belt for sampling. In each of the locations to be sampled, insert templates, the shape of which conform to the shape of the belt. From the selected areas obtain approximately equal increments of material which will form a sample whose quantity equals or exceeds the minimum recommended in 4.3.2. Carefully scoop all material between templates into a suitable container.

5.2.2 *Sampling from Truck Transports*—By a random method, select the units to be sampled from the production of materials delivered. Obtain at least three approximately equal increments. Avoid sampling the extreme top surface. Select at

¹ This practice is under the jurisdiction of ASTM Committee D-4 on Road and Paving Materials and are the direct responsibility of Subcommittee D04.30 on Methods of Sampling.

Current edition approved Nov. 10, 1996. Published January 1997. Originally published as D 979 – 48 T. Last previous edition D 979 – 89.

² *Annual Book of ASTM Standards*, Vol 04.02.

³ *Annual Book of ASTM Standards*, Vol 05.05.

⁴ *Annual Book of ASTM Standards*, Vol 04.03.

⁵ *Annual Book of ASTM Standards*, Vol 14.02.