



Designation: D3549/D3549M – 18 (Reapproved 2023)

Standard Test Method for Thickness or Height of Compacted Asphalt Mixture Specimens¹

This standard is issued under the fixed designation D3549/D3549M; 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 test method covers determination of the thickness (or height) of compacted asphalt mixture specimens.

1.2 *Units*—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 nonconformance with the standard.

1.2.1 Section 7.4 specifies SI units because they are the units used in the equations for Test Methods D1188/D1188M and D2726/D2726M. Performing calculations without first converting any measurements made in inch-pound units to SI units in 7.4 will result in nonconformance 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D8 Terminology Relating to Materials for Roads and Pavements

D1188/D1188M Test Method for Bulk Specific Gravity and Density of Compacted Asphalt Mixtures Using Coated Samples

D2726/D2726M Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Asphalt Mixtures
D3666 Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
D5361/D5361M Practice for Sampling Compacted Asphalt Mixtures for Laboratory Testing

3. Terminology

3.1 *Definitions*—For definitions of terms used in this standard, refer to Terminology D8.

4. Significance and Use

4.1 The thickness of a compacted asphalt mixture is often used as a construction check to ensure that the proper quantity of materials has been placed on a project, and to correct strength measurement on constant diameter specimens with varying heights.

NOTE 1—The text of this test method 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 test method.

NOTE 2—The quality of the results produced by this standard are dependent on the competence of the personnel performing the procedure and the capability, calibration, and maintenance of the equipment used. Agencies that meet the criteria of Specification D3666 are generally considered capable of competent and objective testing, sampling, inspection, etc. Users of this standard are cautioned that compliance with Specification D3666 alone does not completely ensure reliable results. Reliable results depend on many factors; following the suggestions of Specification D3666 or some similar acceptable guideline provides a means of evaluating and controlling some of those factors.

5. Apparatus

5.1 Any of the following apparatus may be used to measure the dimensions of test specimens to the nearest 1 mm [$1/16$ in.]:

NOTE 3—The specifying agency may establish alternate unit requirements for measurement.

5.1.1 A metal tape or rule.

5.1.2 A set of calipers.

5.1.3 A measurement jig or other device, fabricated in such a manner that it is capable of measuring specimen thicknesses in accordance with this procedure.

¹ This test method is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.21 on Specific Gravity and Density of Asphalt Mixtures.

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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.