



Designation: D3666 – 26

Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials¹

This standard is issued under the fixed designation D3666; 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 U.S. Department of Defense.

1. Scope*

1.1 This specification covers the minimum requirements for field and laboratory personnel, for establishing and maintaining a quality management system, and establishes minimum qualifications for agencies engaged in the testing and inspection of road and paving materials.

1.2 Criteria are provided for evaluating the capability of an agency to properly perform designated tests on road and paving materials, and for establishing guidelines pertaining to an agency's organization, personnel, facilities, and quality system. This specification may be supplemented by more specific criteria, such as that in Specification **E329**, and requirements for particular projects.

1.3 This specification can be used as a basis to evaluate testing or inspection agencies, or both, and is intended for use for the qualifying or accrediting, or both, of testing or inspection agencies, public or private, engaged in the testing and inspection of road and paving materials.

1.4 Accreditation is required to comply with this standard. Accreditation for this standard shall include at least one area of competency. (See **8.1.3**.)

1.5 The users of the accredited agency must review the agency's scope of accreditation to ensure the agency has been accredited for its technical competence to perform the tasks requested by the user.

1.6 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.

1.7 *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 appro-*

priate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

1.8 *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 The following referenced documents are those that are specifically mentioned in this specification. These referenced documents are not meant to be all inclusive, as this specification applies, as appropriate, to all test methods under the jurisdiction of Committee D04.

2.2 ASTM Standards:²

C29/C29M Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate

C88/C88M Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate

C128 Test Method for Relative Density (Specific Gravity) and Absorption of Fine Aggregate

C131/C131M Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

C1252 Test Methods for Uncompacted Void Content of Fine Aggregate (as Influenced by Particle Shape, Surface Texture, and Grading)

D5/D5M Test Method for Penetration of Bituminous Materials

D8 Terminology Relating to Materials for Roads and Pavements

D36/D36M Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)

D70/D70M Test Method for Specific Gravity and Density of Semi-Solid Asphalt Binder (Pycnometer Method)

¹ This specification is under the jurisdiction of ASTM Committee **D04** on Road and Paving Materials and is the direct responsibility of Subcommittee **D04.95** on Quality Control, Inspection and Testing Agencies.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at www.astm.org/contact. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

*A Summary of Changes section appears at the end of this standard

D92 Test Method for Flash and Fire Points by Cleveland Open Cup Tester

D113/D113M Test Method for Ductility of Asphalt Materials

D139 Test Method for Float Test for Asphalt Materials

D1074 Test Method for Compressive Strength of Asphalt Mixtures

D1560 Test Methods for Resistance to Deformation and Cohesion of Asphalt Mixtures by Means of Hveem Apparatus (Withdrawn 2024)³

D1561/D1561M Practice for Preparation of Bituminous Mixture Test Specimens by Means of California Kneading Compactor (Withdrawn 2022)³

D1754/D1754M Test Method for Effects of Heat and Air on Asphaltic Materials (Thin-Film Oven Test)

D1856 Test Method for Recovery of Asphalt from Solution by Abson Method

D2872 Test Method for Effect of Heat and Air on a Moving Film of Asphalt Binder (Rolling Thin-Film Oven Test)

D3143/D3143M Test Method for Flash Point of Cutback Asphalt with Tag Open-Cup Apparatus

D4402/D4402M Test Method for Viscosity Determination of Asphalt at Elevated Temperatures Using a Rotational Viscometer

D6084/D6084M Test Method for Elastic Recovery of Asphalt Materials by Ductilometer

D6307 Test Method for Asphalt Content of Asphalt Mixture by Ignition Method

D6521 Practice for Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)

D6648 Test Method for Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)

D6925 Test Method for Preparation and Determination of the Relative Density of Asphalt Mix Specimens by Means of the Superpave Gyrotory Compactor

D6926 Practice for Preparation of Asphalt Mixture Specimens Using Marshall Apparatus

D6927 Test Method for Marshall Stability and Flow of Asphalt Mixtures

D7115 Test Method for Measurement of Superpave Gyrotory Compactor (SGC) Internal Angle of Gyration Using Simulated Loading

D7175 Test Method for Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer

D7226 Test Method for Determining the Viscosity of Emulsified Asphalts Using a Rotational Paddle Viscometer

D7495 Specification for Minimum Requirements for Accreditation Bodies That Accredite Agencies Testing and Inspecting Road and Paving Materials

D7496 Test Method for Viscosity of Emulsified Asphalt by Saybolt Furol Viscometer

E329 Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

E1301 Guide for Proficiency Testing by Interlaboratory Comparisons (Withdrawn 2012)³

2.3 *ISO Standards*:⁴

ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories

3. Terminology

3.1 *Definitions*—The approved standard definitions are listed below.

3.1.1 *agency, n*—the organization engaged to test or inspect road and paving materials as required by a specification or contract.

3.1.1.1 *Discussion*—This term applies to governmental, commercial, or private testing laboratories or inspection entities (including producers' quality control laboratories).

3.1.2 *quality management system (QMS), n*—the organizational structure, responsibilities, procedures, activities, capabilities, and resources that together aim to ensure that the agency is operating in a repeatable and competent manner.

3.1.3 *user, n*—the person or organization engaging the agency to provide inspections or tests; or using this specification to evaluate or accredit the agency.

3.2 *Other Definitions:*

3.2.1 Refer to Terminology **D8**.

4. Significance and Use

4.1 This specification provides the basic minimum criteria for use in evaluating the qualifications of testing or inspection agencies, or both, for road and paving materials. The criteria may be supplemented by more specific criteria and requirements. An individual user can also use it to judge the qualification of an agency.

4.2 The intent of this specification is to provide a consensus basis for evaluating a testing or inspection agency, or both, with respect to that agency's capability to objectively and competently provide the specific services needed by the user.

4.3 This specification can be used as a basis for accreditation.

5. Responsibilities and Duties

5.1 The agency shall ensure that only inspections or tests for which it is adequately equipped and staffed are performed.

5.2 The agency shall ensure that personnel perform only inspections and tests for which they are adequately trained, qualified, and certified in accordance with applicable specifications.

5.3 The agency shall ensure that all equipment is properly maintained in good operating condition and is calibrated as applicable.

5.4 The agency shall perform all testing and inspection in accordance with appropriate standards and quality control criteria. Documents unique to the user shall be furnished to the agency.

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

⁴ Available from International Organization for Standardization (ISO), ISO Central Secretariat, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, <http://www.iso.org>.