



Designation: D3910 – 21

Standard Practices for Design, Testing, and Construction of Slurry Seal¹

This standard is issued under the fixed designation D3910; 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 These practices cover the design, testing, and construction of mixtures for surface treatment of pavements. It is written as a guide and should be used as such. End-use specifications should be adapted to conform to job and user requirements.

1.2 The values stated in SI units are to be regarded as the standard. The non-SI units used in this standard are allowed by the subcommittee for clarification in the use of the standard.

1.3 The text of this standard references notes and footnotes that provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.4 *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.*

1.5 *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

- C128** Test Method for Relative Density (Specific Gravity) and Absorption of Fine Aggregate
- D8** Terminology Relating to Materials for Roads and Pavements

¹ These practices are under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and are the direct responsibility of Subcommittee D04.24 on Asphalt Surface Treatments.

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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.

- D242/D242M** Specification for Mineral Filler for Asphalt Mixtures
- D977** Specification for Emulsified Asphalt
- D1073** Specification for Fine Aggregate for Asphalt Paving Mixtures
- D2397/D2397M** Specification for Cationic Emulsified Asphalt
- D2419** Test Method for Sand Equivalent Value of Soils and Fine Aggregate
- D3666** Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
- 2.2 *Other Documents:*³
 - ISSA A105** Recommended Performance Guidelines for Emulsified Asphalt Slurry Seal
 - ISSA Technical Bulletin No. 106** Test Method for Measurement of Slurry Seal Consistency

3. Terminology

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

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *emulsified asphalt slurry seal mixtures*—as related to these practices, mixtures of fine aggregate with or without mineral filler, with or without mixing water, uniformly mixed with emulsified asphalt.

4. Significance and Use

4.1 These slurry seal practices are written as a guide and should not be construed as specifications.

4.2 End-use specifications should be adopted to conform to job and user requirements.

NOTE 1—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

³ Available from the International Slurry Surfacing Association, 800 Roosevelt Road, Building C, Suite 312, Glen Ellyn, IL 60137, <http://www.slurry.org>.