



Designation: D2940/D2940M – 20

Standard Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports¹

This standard is issued under the fixed designation D2940/D2940M; 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 U.S. Department of Defense.

1. Scope*

1.1 This specification covers quality-controlled graded aggregates that, when hauled to and properly spread and compacted on a prepared grade to appropriate density standards, may be expected to provide adequate stability and load support for use as highway or airport bases or subbases.

NOTE 1—The engineer is cautioned to provide appropriate construction specifications to ensure compaction to an extent that further densification from traffic loadings on the completed pavement will be insignificant. The method suggested is to require compaction on a firm foundation of a short control strip of the material at a suitable moisture content, by means of vibratory or other proven effective rollers or tampers, until no further increase in density results. Compaction requirements should ensure that an average density of certain appropriate percentages of the control strip maximum density be achieved on the balance of the job; for base courses, 98 % is suggested as the minimum average requirement.

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 nonconformance with the standard.

1.3 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.

1.4 *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.*

¹ This specification is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.50 on Aggregate Specifications.

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mentations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 ASTM Standards:²

- C117 Test Method for Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing
- C136/C136M Test Method for Sieve Analysis of Fine and Coarse Aggregates
- D8 Terminology Relating to Materials for Roads and Pavements
- D75/D75M Practice for Sampling Aggregates
- D2419 Test Method for Sand Equivalent Value of Soils and Fine Aggregate
- D4318 Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- D4792/D4792M Test Method for Potential Expansion of Aggregates from Hydration Reactions
- D5821 Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
- D7928 Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis
- 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

3. Terminology

3.1 For definitions of terms used in this standard, see Terminology D8.

4. General Requirements

4.1 Coarse aggregate retained on the 4.75-mm (No. 4) sieve shall consist of durable particles of crushed stone, gravel, or slag capable of withstanding the effects of handling, spreading,

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.

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