



Designation: D 6525 – 00

Standard Test Method for Measuring Nominal Thickness of Permanent Rolled Erosion Control Products¹

This standard is issued under the fixed designation D 6525; 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 is used to measure the nominal thickness of permanent rolled erosion control products.

1.2 The values stated in SI units are to be considered as the standard. The values are provided in inch-pound units for information only.

1.3 This test method does not provide thickness values for permanent rolled erosion control products under variable compressive stresses. This test method determines nominal thickness, not necessarily minimum thickness.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

D 1777 Test Method for Thickness of Textile Materials²

D 4354 Practice for Sampling of Geosynthetics for Testing³

D 4439 Terminology for Geotextiles³

D 5199 Test Method for Measuring Nominal Thickness of Geotextiles and Geomembranes³

3. Terminology

3.1 *Definitions:*

3.1.1 *pressure, n*—the force or load per unit area.

3.1.2 *thickness*—(1) the distance between one planar surface and its opposite parallel and planar surface; (2) *in permanent rolled erosion control products*, the distance between the upper and lower surfaces of the material, measured under a specified pressure and time.

4. Summary of Test Method

4.1 The nominal thickness of permanent rolled erosion control products is determined by observing the perpendicular

distance that a movable plane is displaced from a parallel surface by the permanent rolled erosion control product while under a specified pressure of 0.2 kPa (0.029 psi) for 5 s.

5. Significance and Use

5.1 Thickness is one of the basic physical properties used to control the quality of permanent rolled erosion control products. Thickness values may aid in the calculation of other permanent rolled erosion control product parameters. Thickness however is not generally an indication of field performance and generally should not be used in specifications. This test method is developed to aid manufacturers, designers, and end users in comparing the thickness of permanent rolled erosion control products through the use of an accepted ASTM standard.

5.2 The thickness of permanent rolled erosion control products may vary considerably depending on the pressure applied to the specimen during measurement. Where observed changes occur, thickness decreases when applied pressure is increased. To minimize variation, specific sample size and applied pressure are indicated in this test method to ensure all results are comparable.

5.3 This test method may be used for acceptance testing of commercial shipments of permanent rolled erosion control products, but caution is advised since information on between-laboratory precision is incomplete. Comparative tests in accordance with 5.3.1 may be advised.

5.3.1 In case of a dispute arising from differences in reported test results when using this test method for acceptance testing of commercial shipments, the purchaser and the supplier should conduct comparative tests to determine if there is a statistical bias between their laboratories. Competent statistical assistance is recommended for the investigation of bias. As a minimum, the two parties should take a group of test specimens that are as homogeneous as possible and that are formed from a lot of material of the type in question. The test specimens should be randomly assigned in equal numbers to each laboratory for testing. The average results from the two laboratories should be compared using Students *t*-test for unpaired data and an acceptable probability level chosen by the two parties before the testing is begun. If bias is found, either

¹ This test method is under the jurisdiction of ASTM Committee D-35 on Geosynthetics and is the direct responsibility of Subcommittee D35.05 on Geosynthetic Erosion Control.

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² *Annual Book of ASTM Standards*, Vol 07.01.

³ *Annual Book of ASTM Standards*, Vol 04.13.