



Designation: D8102 – 17 (Reapproved 2024)

Standard Practice for Manufacturing Quality Control of Geotextiles¹

This standard is issued under the fixed designation D8102; 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 practice covers the manufacturing quality control of geotextiles, describing types of tests, the proper test methods, minimum testing frequencies, and best practices for sampling.

1.2 This practice does not address manufacturing quality assurance, product acceptance testing, or conformance testing. These are independent activities taken by organizations other than the geotextiles manufacturer.

1.3 This practice is intended to aid manufacturers, suppliers, purchasers, installers, and end users of geotextiles in establishing a minimum level of effort for maintaining quality control.

1.4 This practice covers procedures for sampling geotextiles for the purpose of manufacturing quality control (MQC). These procedures are designed to ensure that the correct number of representative samples are obtained and properly reported by the manufacturer.

1.5 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.6 *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.*

1.7 *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 practice is under the jurisdiction of ASTM Committee D35 on Geosynthetics and is the direct responsibility of Subcommittee D35.01 on Mechanical Properties.

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2. Referenced Documents

2.1 ASTM Standards:²

- D123 Terminology Relating to Textiles
- D4354 Practice for Sampling of Geosynthetics and Rolled Erosion Control Products (RECPs) for Testing
- D4355/D4355M Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture, and Heat in a Xenon Arc-Type Apparatus
- D4491/D4491M Test Methods for Water Permeability of Geotextiles by Permittivity
- D4533/D4533M Test Method for Trapezoid Tearing Strength of Geotextiles
- D4595/D4595M Test Method for Tensile Properties of Geotextiles by the Wide-Width Method
- D4632/D4632M Test Method for Grab Breaking Load and Elongation of Geotextiles
- D4751 Test Methods for Determining Apparent Opening Size of a Geotextile
- D5261 Test Method for Measuring Mass per Unit Area of Geotextiles
- D6241 Test Method for Measuring Static Puncture Strength of Geotextiles and Geosynthetic-Related Products Using a 50 mm Probe

2.2 American National Standard:³

- ANSI/ASQ Z1.9-2008 Sampling Procedures and Tables for Inspection by Variables for Percent Nonconforming

3. Terminology

3.1 Definitions:

3.1.1 For definitions of other textile terms used in this standard, refer to Terminology D123.

3.2 Organizational Definitions:

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.

³ Available from American Society for Quality (ASQ), 600 N. Plankinton Ave., Milwaukee, WI 53203, <http://www.asq.org>.