



Designation: D8202 – 18

Standard Specification for Hydraulically Applied 100% Wheat Straw Fiber Mulches¹

This standard is issued under the fixed designation D8202; 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.

1. Scope

1.1 This specification covers the composition, physical requirements, manufacturing methods of hydraulically applied wheat straw fiber mulches for revegetation, sediment and erosion control.

1.2 The purpose of this specification is to provide a reference for describing and specifying wheat straw fiber mulch materials for hydraulic applications.

1.3 *Units*—The values stated in inch-pound units are to be regarded as standard, except as noted below. The values given in parentheses are mathematical conversions to SI units, which are provided for information only and are not considered standard. The sieve designations are identified using the “alternative” system in accordance with Practice E11, such as 3-in. and No. 200, instead of the “standard” of 75-mm and 75- μ m, respectively.

1.4 All observed and calculated values shall conform to the guidelines for significant digits and rounding established in Practice D6026, unless superseded by this test method.

1.4.1 The procedures used to specify how data are collected/recorded and calculated in the standard are regarded as the industry standard. In addition, they are representative of the significant digits that generally should be retained. The procedures used do not consider material variation, purpose for obtaining the data, special purpose studies, or any considerations for the user’s objectives; and it is common practice to increase or reduce significant digits of reported data to be commensurate with these considerations. It is beyond the scope of these test methods to consider significant digits used in analysis methods for engineering data.

1.5 *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.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standard-*

ization 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:

D653 Terminology Relating to Soil, Rock, and Contained Fluids

D2974 Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils

D2976 Test Method for pH of Peat Materials

D3740 Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

D6026 Practice for Using Significant Digits in Geotechnical Data

D7367 Test Method for Determining Water Holding Capacity of Fiber Mulches for Hydraulic Planting

D7560 Test Method for Determination of Fiber Length Percentages in Hydraulic Erosion Control Products (HECPs)

E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves

3. Terminology

3.1 Definitions:

3.1.1 For definitions of common technical terms used in this standard, refer to Terminology D653.

3.1.2 *hydraulic erosion control product, (HECP), n*—a manufactured, temporary, degradable, prepackaged fibrous material that is mixed with water and hydraulically applied as a slurry designed to reduce soil erosion and assist in the establishment and growth of vegetation.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *fiber mulch, n*—the mulching medium used either alone, or with additives, mixed with water in hydro-mulching equipment, wetting rapidly with uniform dispersal to create a homogeneous slurry.

3.2.2 *hydraulically applied, adj*—*in erosion control*, refers to the application method of a material using a water slurry, solution, or emulsion to the soil surface through various means, such as nozzle application by hose, tower, and aerially.

¹ This test method is under the jurisdiction of ASTM Committee D18 on Soil and Rock and is the direct responsibility of Subcommittee D18.25 on Erosion and Sediment Control Technology.

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