



Designation: D8030/D8030M – 23

Standard Practice for Sample Preparation for GCCM¹

This standard is issued under the fixed designation D8030/D8030M; 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 standard practice specifies a set of instructions for preparing samples of geosynthetic cementitious composite mat (GCCM) for index property testing.

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 All observed and calculated values shall conform to the guidelines for significant digits and rounding established in Practice [D6026](#).

1.3.1 For purposes of comparing measured or calculated value(s) with specified limits, the measured or calculated value(s) shall be rounded to the nearest decimal or significant digits in the specified limits.

1.3.2 The procedures used to specify how data are collected/recorded or calculated in this practice are regarded as the industry standard. In addition, they are representative of the significant digits that generally should be measured. 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 the significant digits of reported data to be commensurate with these considerations. It is beyond the scope of this practice to consider significant digits used in the analytical methods for engineering design.

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.* Some specific hazards statements are given in Section [7](#) on Hazards.

1.5 *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:*²

[C191](#) Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle

[D4354](#) Practice for Sampling of Geosynthetics and Rolled Erosion Control Products (RECPs) for Testing

[D4439](#) Terminology for Geosynthetics

[D6026](#) Practice for Using Significant Digits and Data Records in Geotechnical Data

3. Terminology

3.1 *Definitions*—For definitions of common technical terms used in this standard, refer to Terminology [D4439](#).

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *cured, adj*—a description of the state of a GCCM after hydration for a specified period of time under specified conditions, followed by a period of time where the GCCM is kept under a specified environmental condition during which the cementitious material continues to cure and develop compressive strength.

3.2.2 *curing time, n*—the time subsequent to initial hydration of the GCCM and immediately prior to the testing of the material during which the cementitious material is allowed to harden and form its final structure. The specific process for curing is specified in [10.3](#).

3.2.3 *hydration, n*—exposure of the GCCM, in this case, to water in prescribed conditions for a prescribed time.

3.2.4 *index property test, n*—in geosynthetics, a standard test that may be used to compare the relative material properties of erosion control products.

3.2.5 *initial setting time, n*—the time subsequent to initial hydration of the GCCM at which the cementitious material

¹ This practice is under the jurisdiction of ASTM Committee [D35](#) on Geosynthetics and is the direct responsibility of Subcommittee [D35.05](#) on Geosynthetic Erosion Control.

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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.