



Designation: **D5268—07 D5268 – 13**

## Standard Specification for Topsoil Used for Landscaping Purposes<sup>1</sup>

This standard is issued under the fixed designation D5268; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reappraisal.

### 1. Scope\*

1.1 This specification covers a physical evaluation of an inorganic soil containing a limited amount of organic material, relative to its use as a topsoil for horticultural purposes in construction. For classification, a full agricultural textural classification may be used.

1.2 The presence in the soil of the correct nutrients and pH status is necessary for healthy plant growth. This specification does not, however, cover a determination of the nutrients, nor their availability.<sup>2</sup>

NOTE 1—The nutrient content of topsoil is important and the nutrients usually evaluated are nitrogen, phosphate, and potassium. Nutrient deficiencies may be corrected using organic or inorganic fertilizers. Excess soluble salts should be examined as to their desirability. The acidity or alkalinity of the soil is also important. Excess acidity may be corrected by the application of lime. Excess alkalinity may be corrected by the application of sulfur or other suitable acidifying compounds. The latter item, in addition to lowering pH, also could be considered as an aggregate when considering the particle size distribution.

1.3 Typical general ranges of soil content are presented in [Table 1](#). Soils falling within these ranges will generally form a suitable topsoil. It must, however, be recognized that in some geographic regions, concurrence with the values of [Table 1](#) would be most difficult. In such cases, locally acceptable specifications would need to be developed.

1.4 The values stated in SI units are to be regarded as the standard. No other units of measurement are included in this standard.

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

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>3</sup>

D653 Terminology Relating to Soil, Rock, and Contained Fluids

D1140 Test Methods for Amount of Material in Soils Finer than No. 200 (75- $\mu$ m) Sieve

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

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

D4753 Guide for Evaluating, Selecting, and Specifying Balances and Standard Masses for Use in Soil, Rock, and Construction Materials Testing

D4972 Test Method for pH of Soils

D6026 Practice for Using Significant Digits in Geotechnical Data

E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves

[E145 Specification for Gravity-Convection and Forced-Ventilation Ovens](#)

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D18 on Soil and Rock and is the direct responsibility of Subcommittee D18.22 on Soil as a Medium for Plant Growth.

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<sup>2</sup> Nutrient testing procedures are found in the state Agricultural Experiment Station recommendations from the state within which the landscape is located, "Methods of Soil Analysis" Editor-in-Chief: C. A. Black, *Agronomy No. 9*, Vol 2, American Society of Agronomy, Inc., Madison, WI, and Hesse, P. R., *A Textbook of Soil Chemical Analysis*, Chemical Publishing Co., New York, NY, 1972. Nutrient testing procedures are found in the state Agricultural Experiment Station recommendations from the state within which the landscape is located: Black, C. A. (editor-in-Chief), "Methods of Soil Analysis," *Agronomy No. 9*, Vol 2, American Society of Agronomy, Inc., Madison, WI; and Hesse, P. R., *A Textbook of Soil Chemical Analysis*, Chemical Publishing Co., New York, NY, 1972.

<sup>3</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto: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