



Designation: D 2978 – 71 (Reapproved 1998)

Standard Test Method for Volume of Processed Peat Materials¹

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1. Scope

1.1 This test method covers the measurement of the volume of loose and baled processed peat expressed as cubic feet.²

1.2 *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:*

E 11 Specification for Wire-Cloth Sieves for Testing Purposes³

3. Summary of Test Method

3.1 The test method consists of dividing the particles of peat by passing them through a 12.5-mm ($\frac{1}{2}$ -in.) sieve and allowing them to fall into a volume-measuring container.

4. Significance and Use

4.1 This test method may be used to quantify the volume of peats under consideration in commercial transactions.

5. Apparatus

5.1 *U. S. Standard Sieve*, 12.5-mm ($\frac{1}{2}$ -in.), conforming to Specification E 11.

5.2 *Container* of steel or wood bound with metal, having one of the following sets of inside dimensions:

5.2.1 $\frac{1}{2}$ ft³ = 12 by 12 by 12-in. container with line scribed 6 in. from the bottom.

5.2.2 $\frac{3}{4}$ ft³ = 12 by 12 by 12-in. container with line scribed 9 in. from the bottom.

5.2.3 1-ft³ = 12 by 12 by 12-in. container.

5.2.4 1-ft³ = 16 by 16-in. base by 13 $\frac{1}{2}$ -in. height.

5.2.5 1-ft³ = 16 by 16-in. base by 33 $\frac{3}{4}$ -in. height.

6. Procedure

6.1 *Loose Peat*—Remove the material from the bag or container, pass it through the 12.5-mm ($\frac{1}{2}$ -in.) sieve and place directly into the measuring box. Pour the contents from approximately 2 ft into the measuring box. Determine the contents of the bag or container only once. The corners of the measuring box shall be well filled by shaking with a rotary motion, one rotation per second for 5 s without lifting the box from the floor or other surface. When filled, level it off by a straightedge to determine the volume.

6.2 *Baled Peat*—The volume of baled material shall be the product of the height by the area of the base. Measurements must be corrected for outside wrappers. Determine the amount of loose peat in a bale by passing through the 12.5-mm ($\frac{1}{2}$ -in.) sieve and measuring the amount of loose peat using the 12 by 12 by 12-in. box and the procedure described in 5.1.

7. Report

7.1 Report the volume of peat in cubic feet.

8. Precision and Bias

8.1 *Precision*—Due to the nature of the soil or rock materials tested by this method it is either not feasible or too costly at this time to produce multiple specimens which have uniform physical properties. Any variation observed in the data is just as likely to be due to specimen variation as to operator or laboratory testing variation. Subcommittee D18.18 welcomes proposals that would allow for development of a valid precision statement.

8.2 *Bias*—There is no accepted reference value for this test method, therefore, bias cannot be determined.

9. Keywords

9.1 peat; volume; volume measure

¹ This test method is under the jurisdiction of ASTM Committee D-18 on Soil and Rock and is the direct responsibility of Subcommittee D18.18 on Peats and Related Materials.

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² Standards for determining the volume and bulk density of undisturbed, in situ peats are presently being prepared by Committee D-18.

³ *Annual Book of ASTM Standards*, Vol 14.02.