



WSDOT Test Method T 123

Method of Test for Bark Mulch

1. Scope

- a. This method covers a procedure for determining the sieve analysis and material finer than No. 4 sieve using a loose volume bucket.

2. Equipment

- a. A mechanical sieve shaker.
- b. Sieves – Sieves conforming to the requirements of ASTM E11. Breaker sieves may be used.
- c. Volume Bucket – A container calibrated in 1 gal. increments from 1 to 5 gal. A 5-gal. bucket may be used when calibrated as follows:

On a level surface calibrate the container by gradually filling it with water in 1 gal. increments. Mark the inner wall of the container after the addition of each gallon

3. Procedure

- a. Air dry (140°F max) the sample for 15 hours, ± 4 hours.
- b. Reduce the sample to testing size per the FOP for AASHTO R 76.
- c. Place the sample in the volume bucket and record the volume as the total volume.
- d. Shake the sample over the 2 in and No. 4 sieves. Using breaker sieves inserted between the two specified sieves so the No. 4 sieve will not be **overloaded**. Use caution to avoid over sieving as the wood material breaks down.
- e. The material retained on the 2 in sieve is measured in the volume bucket and recorded.
- f. The material on the breaker sieves is added to the material retained on the No. 4 sieve and the volume measured in the volume bucket and recorded.
- g. The percent passing is calculated as follows:

$$100 - \frac{(\text{Volume on sieve} \times 100)}{\text{Total Volume}} = \% \text{ passing}$$

Performance Exam Checklist

WSDOT T 123

Method of Test for Bark Mulch

Participant Name _____

Exam Date _____

Procedure Element

Yes No

1. The tester has a copy of the current procedure on hand?
2. All equipment is functioning according to the test procedure, and if required, has the current calibration/verification tags present?
3. Bark mulch sample dried for 15 ± 4 hrs @ 140°F?
4. Five (5) gallon bucket calibrated in 1 gal. increments?
5. Sample quartered or split and placed in calibrated bucket?
6. Volume of sample in bucket recorded as total volume?
7. Sample screened in the shaker through 1½ in screen, breaker screens and No. 4 screen?
8. Do not over shake to prevent degrading of sample?
9. Remove 1½ in screen and damp material in calibrated bucket and record volume as volume on 1½ in screen?
10. Place all breaker screen material down to No. 4 screen in bucket and record volume as volume on No. 4 screen?
11. All calculations performed correctly?
12. Report results?

First Attempt: Pass Fail

Second Attempt: Pass Fail

Signature of Examiner _____

Comments:

