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: