Washington State Department of Transportation

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: _____

Record the symbols "P" for passing or "F" for failing on each step of the checklist.

	Procedure Element	Trial 1	Trial 2
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 air dried for 15 ± 4 hrs (@ 140°F max)?	____	____
4.	Five (5) gallon bucket calibrated in 1 gal. increments?	____	____
5.	Sample reduced according to FOP for AASHTO R 76 and placed in calibrated bucket?	____	____
6.	Volume of sample in bucket recorded as total volume?	____	____
7.	Sample screened in the shaker through 2 in screen, breaker screens and No. 4 screen?	____	____
8.	Do not over shake to prevent degrading of sample?	____	____
9.	Remove 2 in screen and damp material in calibrated bucket and record volume as volume on 2 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?	____	____

Comments: First Attempt: Pass _____ Fail _____ Second Attempt: Pass _____ Fail _____

Examiner Signature: _____ WAQTC #: _____