



WSDOT Test Method T 724

Method of Preparation of Aggregate for HOT MIX ASPHALT (HMA) Mix Designs

1. Scope

This method of test is intended for the processing and preparation of aggregate samples for use in HMA mix designs and Ignition Furnace calibration samples for Hot Mix Asphalt, asphalt treated base, or open graded products.

2. Apparatus

- a. Sieves – shall conform to the specifications of sieves for testing purposes.
- b. Mechanical sieve shaker – of sufficient size to separate the material to the specification sieves.
- c. Oven(s) – of appropriate size, capable of maintaining a uniform temperature of $325 \pm 25^{\circ} \text{F}$ ($163 \pm 14^{\circ} \text{C}$).
- d. Container – pans or containers of suitable size to dry and store the aggregate.
- e. Balance – capacity of at least 8 kg sensitive to 0.1 g and meeting the requirements of AASHTO M 231.
- f. Aggregate washer (optional).

3. Procedure

- a. Representative sample(s) of the production aggregates shall be obtained.
- b. Dry the aggregate in an oven to a constant mass not to exceed 350°F .
Note: When developing an Ignition Furnace Calibration Factor, samples from separate stockpiles can be combined in the same percentages as the job mix formula prior to further processing. The combined sample should be at least four times the amount required for a single test (i.e., IFCF determination).
- c. Sieve the aggregate over all the specification sieves designated for class of mix being tested. Place the material retained on each sieve in separate containers.
- d. Wash the separated aggregate samples, except the portion passing the No. 200 (0.075 mm) sieve, in accordance with WSDOT FOP for WAQTC/AASHTO T 27/11.
- e. Dry the washed, aggregate samples to constant mass.
- f. Recombine the aggregate samples to match the grading of the job mix formula. The sample size as determined by the specific test procedure performed.

Performance Exam Checklist

Method of Preparation of Aggregate for Hot Mix Asphalt (HMA) Mix Designs WSDOT Test Method T 724

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. Representative sample(s) of the production aggregates obtained.
- 4. Aggregate dried in an oven to a constant mass?
- 5. Aggregate sieved over designated sieves for class of mix being tested?
- 6. Material retained on each sieve placed in separate containers?
- 7. Separated aggregates washed, except the portion passing the No. 200 (0.075 mm) sieve, in accordance with FOP for AASHTO T27/T11?
- 8. Washed aggregate samples dried in an oven to a constant mass?
- 9. Aggregate recombined to match the grading of the job mix formula?
- 10. Sample size determined by the specific test procedure to be performed?

First Attempt: Pass Fail Second Attempt: Pass Fail

Signature of Examiner _____

Comments:

