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# **ATTI - PERFORMANCE CHECKLIST**

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## **AASHTO T27-24 – Sieve Analysis of Fine and Coarse Aggregates**

*Sect.*            **Sampling**

- 6.2    1.    Thoroughly mix the sample and reduce it using the procedures in R76. The sample for test shall be the approximate mass desired when dry and shall be the end result of the reduction.
- 6.3    2.    Fine Aggregate – The size of the test sample after drying shall be 300 grams minimum.
- 6.4-    3.    Coarse Aggregate and (Coarse and Fine Aggregates Mixtures) – The mass of the  
6.5    test sample shall conform with the table.

**Procedure**

- 7.1    4.    Dry it to constant mass according to T255. Determine and record the mass to the nearest 0.1 gram.
- 7.2    5.    Select sieves with suitable openings to furnish the information required by the specifications covering the material to be tested. Use additional sieves to regulate the amount of material on a sieve to meet the requirements in Annex A1. Nest the sieves in order of decreasing size. Agitate the sieves by hand or by mechanical apparatus for a sufficient period to meet the criterion in Annex A2.
- 7.3 –    6.    Limit the quantity of material on a given sieve so that all particles have  
7.3.1    opportunity to reach sieve opening a number of times during the sieving operation. Prevent an overload of material on an individual sieve as described in Annex A.
- 7.5    7.    Determine the mass of each size increment to the nearest 0.1 gram. The total mass of the material after sieving should check closely to the original mass. If the two amounts differ by more than 0.3 percent, the results should not be used for acceptance testing.
- 9.2    8.    Report percentages to the nearest whole number, except if the passing #200 is less than 10 percent, it shall be reported to the nearest 0.1 percent.

*A2*                **Time Evaluation**

- A2.1    9.    The minimum time requirement shall be evaluated for each shaker at least annually.

## AASHTO T27-24 – Sieve Analysis of Fine and Coarse Aggregates

- A2.1.1 10. Shake the sample over nested sieves for approximately 10 minutes.
- A2.1.2 11. Provide a snug-fitting pan and cover for each sieve and hold the items in a slightly inclined position in one hand.
- A2.1.3 12. Hand-shake each sieve continuously for 60 seconds by striking the side of the sieve sharply and with an upward motion against the heel of the other hand at the rate of about 150 times per min, turning the sieve about one sixth of a revolution at intervals of about 25 strokes.
- A2.2 13. If more than 0.5 percent by mass of the total sample before sieving passes any sieve after one minute of continuous hand sieving, adjust the shaker time and repeat.