# Performance Examination - Aggregate

## Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing (ASTM C117-17)

**Candidate Name:** _____  **NICET ID:** _____

| Apparatus | Trial 1 | Trial 2 |
|---|---|---|
| **Balance** Readable to 0.1 g or 0.1% of test load, whichever is greater | | |
| **Sieves (Nest of 2)** a. 75-µm (No. 200)<br>b. Upper: 1.18 mm (No. 16) | | |
| **Oven** Maintains uniform temperature of 110 ± 5°C (230 ± 9°F) | | |
| **Wetting Agent** *(for Procedure B only)* | | |
| **Mechanical Washing Apparatus** *(optional)* Results are consistent with those obtained using manual methods; Degradation of the sample is avoided. | | |

| Procedures | Trial 1 | Trial 2 |
|---|---|---|
| **Procedure A** | | |
| 1. Test sample obtained by Practice C702 | | |
| 2. Test sample mass conforms to table below<br>*If the nominal maximum size of the aggregate to be tested is not listed below, the next larger size listed shall be used to determine sample size.* | | |

| Nominal Maximum Size | Minimum Mass, g |
|---|---|
| 4.75 mm (No. 4) or finer | 300 |
| Greater than 4.75 mm (No. 4) to 9.5 mm (⅜ in.) | 1000 |
| Greater than 9.5 mm (⅜ in.) to 19.0 mm (¾ in.) | 2500 |
| Greater than 19.0 mm (¾ in.) to 37.5 mm (1½ in.) | 5000 |

| | Trial 1 | Trial 2 |
|---|---|---|
| 3. Dry test sample to constant mass at temperature of 110 ± 5°C (230 ± 9°F) | | |
| 4. Test sample mass determined to 0.1% | | |
| 5. Place in container and cover with water | | |
| 6. Vigorously agitate contents of container | | |
| 7. Complete separation of coarse and fine particles | | |
| 8. Pour wash water through nested sieves | | |

**Examiner Name:** _____  **Examiner Signature:** _____  **Date:** _____

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| Procedures (continued) | Trial 1 | Trial 2 |
|---|---|---|
| 9.  Check wash water is free of coarse particles | | |
| 10. Continue operation until wash water is clear | | |
| 11. Return material on sieves to the washed sample | | |
| 12. Decant excess water from washed sample through 75-µm (No. 200) sieve | | |
| 13. Dry washed aggregate to constant mass at 110 ± 5°C (230 ± 9°F) | | |
| 14. Determine washed aggregate mass to 0.1% | | |
| 15. Calculate amount of material passing 75-µm (No. 200) sieve by washing as follows: $$A = [(B - C)/B] \times 100$$ A = % of material finer than 75-µm (No. 200) sieve by washing<br>B = original dry mass of sample, g<br>C = dry mass of sample after washing, g | | |
| **Procedure B** | | |
| 1. Prepare sample using same steps as Procedure A | | |
| 2. Add wetting agent | | |

**First Attempt:** Pass: _____ Fail: _____ **Second Attempt:** Pass: _____ Fail: _____

**Exam Administration:** Remote _____ In-Person _____

**Comments:**
_____
_____
_____
_____
_____
_____

**Examiner Name:** _____ **Examiner Signature:** _____ **Date:** _____