



Performance Examination - Aggregate

Standard Method of Test for Clay Lumps and Friable Particles in Aggregates (AASHTO T 112-00) [ASTM C142 / C142M-17]

Candidate Name: _____ NICET ID: _____

Apparatus	Trial 1	Trial 2
Balance Readable accurate to 0.1% of sample mass, or better		
Sieves 4.75 mm (No. 4), 1.18 mm (No. 16), and other sizes as needed		
Oven Capable of maintaining a temperature of 110 ± 5 °C (230 ± 10 °F)		
Containers Rust resistant, a shape such that sample can be spread in a thin layer on the bottom		

Procedures	Trial 1	Trial 2										
Sample Preparation												
1. Samples were taken from materials left over from C117												
2. Material dried to substantially constant mass at 110 ± 5 °C (230 ± 10 °F)												
3. Fine Aggregate, sample mass at least 25 g, consists of particles coarser than 1.18-mm (No. 16) sieve												
Coarse Aggregate												
4. Consists of particles coarser than 4.75-mm (No. 4)												
5. Sample mass at least:												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Size of Particles Making up Test Sample</th> <th style="text-align: center;">Mass of Test Sample</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">No. 4 to 3/8 in.</td> <td style="text-align: center;">1000g</td> </tr> <tr> <td style="text-align: center;">3/8 to 3/4 in.</td> <td style="text-align: center;">2000g</td> </tr> <tr> <td style="text-align: center;">3/4 to 1 1/2 in.</td> <td style="text-align: center;">3000g</td> </tr> <tr> <td style="text-align: center;">Over 1 1/2 in.</td> <td style="text-align: center;">5000g</td> </tr> </tbody> </table>	Size of Particles Making up Test Sample	Mass of Test Sample	No. 4 to 3/8 in.	1000g	3/8 to 3/4 in.	2000g	3/4 to 1 1/2 in.	3000g	Over 1 1/2 in.	5000g		
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Over 1 1/2 in.	5000g											
Mixtures of Fine and Coarse Aggregate												
6. Material separated into two sizes on the 4.75-mm (No. 4) sieve												
7. Sample mass determined to 0.1% and spread in a thin layer on the bottom of the container covered with distilled water and soaked for 20 to 28 hours												
8. Particles rolled between thumb and forefinger to attempt to break them												
9. Fingernails not used to break particles												
10. The residue of friable particles removed by wet sieving as follows:												
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Size of Particles	Size of Sieve											
Fine Aggregate	No. 20											
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Examiner Name: _____ Examiner Signature: _____ Date: _____



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Procedures (continued)	Trial 1	Trial 2
11. Residue from each sieving dried to constant mass		
12. Mass of residue determined to 0.1%		

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

Comments:

Examiner Name: _____ Examiner Signature: _____ Date: _____