

PERCENT CRUSHED PARTICLES IN COARSE AGGREGATE

APPARATUS

1. Balance: Readable to 1g or less , accurate to 0.1% of test load?..... \_\_\_\_\_

PROCEDURE

\* Test samples for both Methods A & B obtained by MTO LS-600?..... \_\_\_\_\_

Preparation Method A

1. Sample separated into fractions according to LS-602?..... \_\_\_\_\_  
 2. Sample fraction ( Passing 26.5mm - retained 4.75mm ) reduced to approximate masses in TABLE 1?..... \_\_\_\_\_

TABLE 1

Largest particle size (>95% passing sieve)	Mass (minimum), g
26.5mm	1000
16.0mm	850
13.2mm	500
9.5mm	200
6.7	75

3. Reduced sample weighed to nearest 1g?..... \_\_\_\_\_

Preparation Method B

1. Sample separated into individual fractions in TABLE 2. Separated according to LS-602?..... \_\_\_\_\_  
 2. Sample prepared to individual minimum fraction masses in TABLE 2?..... \_\_\_\_\_  
 3. Individual fraction masses represent at least 5% of submitted sample?..... \_\_\_\_\_  
 4. Reduced fractions weighed to nearest 1g?..... \_\_\_\_\_

TABLE 2

Coarse Aggregate Fraction		Mass (minimum) , g
Passing	Retained	
26.5mm	19.0mm	200 particles minimum
19.0mm	13.2mm	1250
13.2mm	9.5mm	500
9.5mm	6.7mm	200
6.7mm	4.75mm	75

Procedure

1. Sample or each fraction spread on large,clear flat surface?..... \_\_\_\_\_  
 2. Separate asphaltic, glass or ceramic material?..... \_\_\_\_\_  
 3. Separate crushed concrete, included as crushed particles?..... \_\_\_\_\_  
 4. Particles separated into portions according to whether (host) particle is crushed , uncrushed , with or without cementations?..... \_\_\_\_\_  
 5. Weigh and record mass of each portion to nearest 1g?..... \_\_\_\_\_  
 6. Calculation for test sample (Method A) or each fraction ( Method B)?..... \_\_\_\_\_

% Crushed Particles =  $\frac{A + B}{\text{Total Mass}}$  x 100

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$$A + B + C + D$$

$$\% \text{ Cemented Particles} = \frac{B + D}{A + B + C + D} \times 100$$

Where: A = mass of crushed particles  
B = mass of crushed cementations  
C = mass of uncrushed particles  
D = mass of uncrushed cementations

7. Calculation for weighted average ; Method B?..... \_\_\_\_\_

$$\text{Weighted \% Crushed Particles} = \frac{\sum (\text{Fraction \% Crushed} \times \text{ret Grading})}{100}$$

$$\text{Weighted \% Cemented Particles} = \frac{\sum (\text{Fraction \% Cemented} \times \text{ret Grading})}{100}$$

COMMENTS:

Name of Laboatory: \_\_\_\_\_ Date: \_\_\_\_\_  
Inspector: \_\_\_\_\_ Inspection No. \_\_\_\_\_