

Procedure Checklist

FM 1-T096 Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

		P	F	NA
1.	Obtain sample per FM 1T002 and reduce to test sample size per FM 1-T248.			
2.	Dry the test sample to constant mass at $110 \pm 5^{\circ}\text{C}$ ($230 \pm 9^{\circ}\text{F}$) or washing the test sample is permitted before test is performed.			
3.	Separate into individual size fractions and recombine to the grading in Table 1 in the procedure, most nearly corresponding to the range of sizes in the work.			
4.	Determine mass of recombined sample to nearest 1 g.			
5.	Place recombined test sample and the charge in the LA machine.			
6.	Rotate the machine at 30 to 33 rpm for 500 revolutions.			
7.	Discharge the material from the machine and separate over a No. 12 sieve.			
8.	Wash the +No. 12 material only if the test sample was washed before, then oven dry to substantially constant mass at $110 \pm 5^{\circ}\text{C}$ ($230 \pm 9^{\circ}\text{F}$), and determine mass to nearest 1 g.			
9.	Calculate the loss as a percentage of original recombined mass.			
10.	Report results to the nearest 1% by mass.			
Modified Los Angeles Abrasion Test – (Standard Specifications, Sub Article 901-4). Light Weight Aggregate.				
11.	Determine the dry-loose unit weight of the lightweight aggregate.			
12.	Assume the average unit weight of conventional aggregate to be 90 PCF.			
13.	Reduce the lightweight aggregate sample by the formula in the procedure.			
14.	Reduce the abrasive charge by the formula in the procedure.			
15.	After these steps proceed according to standard test method above.			
Modified Los Angeles Abrasion Test – Fine Aggregate				
16.	Abrasive charge – Six steel spheres as for grading D and conforming to 5.4.1 shall be used.			
17.	Test Sample – The test sample shall consist of clean (washed) aggregate representative of the material under test.			
18.	The aggregate shall be dried to constant mass $110 \pm 5^{\circ}\text{C}$ ($230 \pm 9^{\circ}\text{F}$).			
19.	Separate into individual size fractions, and the test sample selected to comply with Table II.			
20.	The weight of the sample prior to test shall be recorded to the nearest 1.0 gram.			
21.	Procedure is the same as 9.1 except that a No. 50 sieve shall be used instead of a No. 12 sieve for sieving.			
22.	The washing of the test sample after abrading is eliminated.			
23.	Determine the percentage of loss as in 9.			

Remarks: **Comparison Criteria: Maximum Difference = $\pm 12.7\%$ of mean of two tests**

Date: _____ Technician: _____ IA Observer: _____

Technician's E-mail Address: _____

Employer's/ Supervisor's E-mail Address: _____