

Procedure Checklist

FM 1-R 076 - Reducing Aggregate of Samples to Testing Size

		P	F	N/A
A) Method A: Mechanical Splitter				
1.	Check sample splitter chute openings. Fine 12 Coarse 8			
2.	Place sample in hopper or pan and uniformly distribute it from edge to edge.			
3.	The rate at which the sample is introduced shall be such as to allow free flowing through chutes into receptacles.			
4.	Smaller particles adhering to the chutes or splitting bar shall be brushed downwards into the containers.			
5.	Reintroduce the portion of the sample in one of the receptacles as many times as necessary to reduce sample to specified size.			
B) Alternate Method A: The Cone Splitter				
6.	Place bag in cone splitter by lifting carefully, gathering top of untied bag with one hand and placing other hand on the bottom of bag.			
7.	Invert bag, top to bottom, and allow bag to slide down slowly into cone, continuing to keep closed.			
8.	Grasp sample bag by the corners and with rapid upward movement, allow material to spill downward across the splitting bars.			
9.	Select diagonally opposite quarters, remix quarters in bag, and then reintroduced through the cone again for as many times as necessary to reduce sample to specified size.			
Note: If a door restricting flow is at the bottom of the cone, material may be poured directly into cone.				
10.	Open the door, allowing material to spill across the splitting bars.			
C) Method B: Quartering				
11.	The sample is placed on a hard clean, level surface.			
12.	Sample is mixed a minimum of 3 times. After mixed, the sample is shoveled into a conical pile.			
13.	Flatten conical pile to uniform thickness and diameter, by pressing down with shovel or other device.			
14.	Divide flattened mass into 4 approximately equal quarters with shovel, trowel or other suitable device and remove two diagonally opposite quarters including all fines.			
15.	Mix and quarter remaining sample material until sample is reduced to the desired size.			
D) Alternate Method B: Quartering				
16.	Flatten pile as described in Method B.			
17.	Insert stick or pipe beneath the blanket and under the center of the pile.			
18.	Lift both ends of stick to divide the sample into 2 equal parts.			
19.	Remove the stick leaving the fold of the blanket between the divided portions.			
20.	Insert the stick under the center of the pile at right angles to the first division, again lift both ends of the stick dividing the sample into 4 equal parts.			
21.	Remove 2 opposite quarters being careful to remove the fines.			
22.	Mix and quarter remaining material until sample is reduced to desired size.			
E) Method C: Miniature Stockpile Sampling (Damp Fine Aggregate Only)				
23.	A straightedge scoop, shovels, or trowel for mixing the aggregate, and either a small sampling thief, scoop, or spoon for sampling.			
24.	The damp fine aggregate sample is placed on a hard, clean, level surface.			
25.	Sample is mixed a minimum of 3 times. After mixed, the sample is shoveled into a conical pile.			
26.	If desired, flatten conical pile to uniform thickness and diameter, by pressing down with shovel or other device.			
27.	Obtain a sample by selecting at least five increments of material at random locations from the miniature stockpile, using any of the sampling devices from above.			

Remarks: Comparison Criteria: N/A

Date: _____ Technician: _____ IA Observer: _____

Technician's E-mail Address: _____

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