

FLAKINESS INDEX

Observation and Calculation:

SIZE OF AGGREGATE		THICKNESS GAUGE (0.6 TIMES THE MEAN SIEVE) mm	Weight of the fraction consisting of atleast 200 pieces in gm.	Weight of aggregates in each fraction passing thickness gauge, gm.
PASSING THROUGH I.S. SIEVE mm	RETAINED ON I.S. SIEVE mm			
63	50	33.90		
50	40	27.00		
40	25	19.50		
31.5	25	16.95		
25	20	13.50		
20	16	10.80		
16	12.5	8.55		
12.5	10.0	6.75		
10	6.3	4.89		

Result: The flakiness index of the given sample of aggregates is _____ %.

ELONGATION INDEX

Observation and Calculation:

SIZE OF AGGREGATE		LENGTH GAUGE (1.8 TIMES THE MEAN SIEVE) mm	Weight of the fraction consisting of atleast 200 pieces in gm.	Weight of aggregates in each fraction retained on length gauge, gm.
PASSING THROUGH I.S. SIEVE mm	RETAINED ON I.S. SIEVE mm			
63	50	-		
50	40	81.00		
40	25	58.50		
31.5	25	-		
25	20	40.50		
20	16	32.40		
16	12.5	25.60		
12.5	10.0	20.20		
10	6.3	14.70		

Result: The elongation index of a given sample of aggregate is _____ %.

AGGREGATE IMPACT VALUE (AIV)

Sl. No.	Details of Sample	Trail 1	Trail 2	Average
1	Total Weight of aggregate sample filling the cylinder measure = W_1 g			
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g			
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g			
4	$(W_1 - W_2 + W_3)$			
5	Aggregate Impact Value = $(W_2 / W_1) * 100$ Percent			

Result:

The mean A.I.V is _____ %.

Viva voce:

1. How is aggregate Impact expressed?
2. What do you understand by dry and wet Impact value?
3. Aggregate Impact value of material A is 15 and that of B is 35. Which one is better for surface course?