

TEST DATA ON MINERAL AGGREGATES FOR EACH GROUP

G1 DATA

1. DETERMINATION OF UNIT WEIGHT TEST	
a) Using the Tamping Rod	
Mass of the aggregate + the measure, G kg	7.532
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
b) Without Using the Tamping Rod	
Mass of the aggregate + the measure, G = kg	7.284
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
2. DETERMINATION OF SPECIFIC GRAVITY AND ABSORPTION TEST	
<u>For Fine Aggregate:</u>	
Dry weight of the test sample, A = (g)	480
Saturated surface dry weight of the test sample, B = (g)	510
Weight of the test sample + flask, C = (g)	1015
Weight of flask with water filled to 500 ml mark, D = (g)	700
<u>For Coarse Aggregate:</u>	
Dry weight of the test sample, A = (g)	2350
Saturated surface dry weight of the test sample, in air, B = (g)	2600
Saturated surface dry weight of the test sample, in water, C = (g)	1600
3. SIEVE ANALYSIS	
<u>Data obtained from the sieve analysis of a fine aggregate:</u>	
Sieve	Retained on (g)
3/8"	0
No:4	70
No:8	180
No:16	270
No:30	170
No:50	210
Pan	0
<u>Data obtained from the sieve analysis of a coarse aggregate:</u>	
Sieve	Retained on (g)
2"	0
3/2"	70
3/4"	190
3/8"	780
No:4	320
No:8	30
Pan	0

4. DETERMINATION OF THE AMOUNT OF MATERIAL FINER THAN NO.200 SIEVE TEST	
Original dry mass of sample, B =g	290
Dry mass of sample after washing, C =g	250
5. ALKALI REACTIVITY OF AGGREGATES TEST	
Initial Length = 285 mm	285
Length of the specimen after 5 days =	285.79
Length of the specimen after 9days =	286.128
Length of the specimen after 11 days =	286.152
Length of the specimen after 14 days =	286.198
6. SOUNDNESS TEST	
The sieve size through which the aggregate passes = 4 32 16 2" 30 3/8" 8 50	
After 5 repetitions of the test, loss in weight;	
Treated with magnesium sulfate solution, % =	9
Treated with sodium sulfate solution, % =	13
7. RESISTANCE TO ABRASION TEST	
The weight of the test sample after 100 revolutions =	4700
The weight of the test sample after 500 revolutions =	3950

G2 DATA

1. DETERMINATION OF UNIT WEIGHT TEST	
a) Using the Tamping Rod	
Mass of the aggregate + the measure, G kg	7.465
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
b) Without Using the Tamping Rod	
Mass of the aggregate + the measure, G = kg	7.295
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
2. DETERMINATION OF SPECIFIC GRAVITY AND ABSORPTION TEST	
<u>For Fine Aggregate:</u>	
Dry weight of the test sample, A = (g)	475
Saturated surface dry weight of the test sample, B = (g)	490
Weight of the test sample + flask, C = (g)	1000
Weight of flask with water filled to 500 ml mark, D = (g)	700
<u>For Coarse Aggregate:</u>	
Dry weight of the test sample, A = (g)	2410
Saturated surface dry weight of the test sample, in air, B = (g)	2565
Saturated surface dry weight of the test sample, in water, C = (g)	1720
3. SIEVE ANALYSIS	
<u>Data obtained from the sieve analysis of a fine aggregate:</u>	

Sieve	Retained on (g)
3/8"	0
No:4	80
No:8	200
No:16	300
No:30	190
No:50	230
Pan	0
<u>Data obtained from the sieve analysis of a coarse aggregate:</u>	
Sieve	Retained on (g)
2"	0
3/2"	80
3/4"	150
3/8"	740
No:4	360
No:8	70
Pan	0
4. DETERMINATION OF THE AMOUNT OF MATERIAL FINER THAN NO.200 SIEVE TEST	
Original dry mass of sample, B =g	260
Dry mass of sample after washing, C =g	240
5. ALKALI REACTIVITY OF AGGREGATES TEST	
Initial Length = 285 mm	285
Length of the specimen after 5 days =	285.94
Length of the specimen after 9days =	286.234
Length of the specimen after 11 days =	286.248
Length of the specimen after 14 days =	286.321
6. SOUNDNESS TEST	
The sieve size through which the aggregate passes = 4 32 16 2" 30 3/8" 8 50	
After 5 repetitions of the test, loss in weight;	
Treated with magnesium sulfate solution, % =	11
Treated with sodium sulfate solution, % =	17
7. RESISTANCE TO ABRASION TEST	
The weight of the test sample after 100 revolutions =	4900
The weight of the test sample after 500 revolutions =	4300

G3 DATA

1. DETERMINATION OF UNIT WEIGHT TEST	
a) Using the Tamping Rod	
Mass of the aggregate + the measure, G kg	7.684
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
b) Without Using the Tamping Rod	
Mass of the aggregate + the measure, G = kg	7.324
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
2. DETERMINATION OF SPECIFIC GRAVITY AND ABSORPTION TEST	
<u>For Fine Aggregate:</u>	
Dry weight of the test sample, A = (g)	510
Saturated surface dry weight of the test sample, B = (g)	530
Weight of the test sample + flask, C = (g)	1030
Weight of flask with water filled to 500 ml mark, D = (g)	710
<u>For Coarse Aggregate:</u>	
Dry weight of the test sample, A = (g)	2500
Saturated surface dry weight of the test sample, in air, B = (g)	2900
Saturated surface dry weight of the test sample, in water, C = (g)	1800
3. SIEVE ANALYSIS	
<u>Data obtained from the sieve analysis of a fine aggregate:</u>	
Sieve	Retained on (g)
3/8"	0
No:4	50
No:8	210
No:16	280
No:30	200
No:50	240
Pan	0
<u>Data obtained from the sieve analysis of a coarse aggregate:</u>	
Sieve	Retained on (g)
2"	0
3/2"	100
3/4"	170
3/8"	760
No:4	380
No:8	90
Pan	0
4. DETERMINATION OF THE AMOUNT OF MATERIAL FINER THAN NO.200 SIEVE TEST	
Original dry mass of sample, B =g	280

Dry mass of sample after washing, C =g	240
5. ALKALI REACTIVITY OF AGGREGATES TEST	
Initial Length = 285 mm	285
Length of the specimen after 5 days =	285.68
Length of the specimen after 9 days =	286.103
Length of the specimen after 11 days =	286.269
Length of the specimen after 14 days =	286.311
6. SOUNDNESS TEST	
The sieve size through which the aggregate passes = 4 32 16 2" 30 3/8" 8 50	
After 5 repetitions of the test, loss in weight;	
Treated with magnesium sulfate solution, % =	7
Treated with sodium sulfate solution, % =	16
7. RESISTANCE TO ABRASION TEST	
The weight of the test sample after 100 revolutions =	4550
The weight of the test sample after 500 revolutions =	4100

G4 DATA

1. DETERMINATION OF UNIT WEIGHT TEST	
a) Using the Tamping Rod	
Mass of the aggregate + the measure, G kg	7.651
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
b) Without Using the Tamping Rod	
Mass of the aggregate + the measure, G = kg	7.451
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
2. DETERMINATION OF SPECIFIC GRAVITY AND ABSORPTION TEST	
<u>For Fine Aggregate:</u>	
Dry weight of the test sample, A = (g)	500
Saturated surface dry weight of the test sample, B = (g)	515
Weight of the test sample + flask, C = (g)	1035
Weight of flask with water filled to 500 ml mark, D = (g)	710
<u>For Coarse Aggregate:</u>	
Dry weight of the test sample, A = (g)	2580
Saturated surface dry weight of the test sample, in air, B = (g)	2920
Saturated surface dry weight of the test sample, in water, C = (g)	1824
3. SIEVE ANALYSIS	

<u>Data obtained from the sieve analysis of a fine aggregate:</u>	
Sieve	Retained on (g)
3/8"	0
No:4	90
No:8	160
No:16	280
No:30	150
No:50	200
Pan	0
<u>Data obtained from the sieve analysis of a coarse aggregate:</u>	
Sieve	Retained on (g)
2"	0
3/2"	60
3/4"	120
3/8"	710
No:4	330
No:8	40
Pan	0
4. DETERMINATION OF THE AMOUNT OF MATERIAL FINER THAN NO.200 SIEVE TEST	
Original dry mass of sample, B =g	240
Dry mass of sample after washing, C =g	180
5. ALKALI REACTIVITY OF AGGREGATES TEST	
Initial Length = 285 mm	285
Length of the specimen after 5 days =	285.936
Length of the specimen after 9days =	286.21
Length of the specimen after 11 days =	286.453
Length of the specimen after 14 days =	286.546
6. SOUNDNESS TEST	
The sieve size through which the aggregate passes = 4 32 16 2" 30 3/8" 8 50	
After 5 repetitions of the test, loss in weight;	
Treated with magnesium sulfate solution, % =	12
Treated with sodium sulfate solution, % =	18
7. RESISTANCE TO ABRASION TEST	
The weight of the test sample after 100 revolutions =	4650
The weight of the test sample after 500 revolutions =	3400

G5 DATA

1. DETERMINATION OF UNIT WEIGHT TEST	
a) Using the Tamping Rod	
Mass of the aggregate + the measure, G = kg	7.522
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
b) Without Using the Tamping Rod	
Mass of the aggregate + the measure, G = kg	7.298
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
2. DETERMINATION OF SPECIFIC GRAVITY AND ABSORPTION TEST	
<u>For Fine Aggregate:</u>	
Dry weight of the test sample, A = (g)	490
Saturated surface dry weight of the test sample, B = (g)	510
Weight of the test sample + flask, C = (g)	1020
Weight of flask with water filled to 500 ml mark, D = (g)	705
<u>For Coarse Aggregate:</u>	
Dry weight of the test sample, A = (g)	2310
Saturated surface dry weight of the test sample, in air, B = (g)	2400
Saturated surface dry weight of the test sample, in water, C = (g)	1400
3. SIEVE ANALYSIS	
<u>Data obtained from the sieve analysis of a fine aggregate:</u>	
Sieve	Retained on (g)
3/8"	0
No:4	40
No:8	190
No:16	250
No:30	180
No:50	210
Pan	0
<u>Data obtained from the sieve analysis of a coarse aggregate:</u>	
Sieve	Retained on (g)
2"	0
3/2"	90
3/4"	160
3/8"	750
No:4	370
No:8	80
Pan	0
4. DETERMINATION OF THE AMOUNT OF MATERIAL FINER THAN NO.200 SIEVE TEST	
Original dry mass of sample, B =g	220

Dry mass of sample after washing, C =g	200
5. ALKALI REACTIVITY OF AGGREGATES TEST	
Initial Length = 285 mm	285
Length of the specimen after 5 days =	285.786
Length of the specimen after 9 days =	286.114
Length of the specimen after 11 days =	286.161
Length of the specimen after 14 days =	286.262
6. SOUNDNESS TEST	
The sieve size through which the aggregate passes = 4 32 16 2" 30 3/8" 8 50	
After 5 repetitions of the test, loss in weight;	
Treated with magnesium sulfate solution, % =	8
Treated with sodium sulfate solution, % =	13
7. RESISTANCE TO ABRASION TEST	
The weight of the test sample after 100 revolutions =	4200
The weight of the test sample after 500 revolutions =	3600

G6 DATA

1. DETERMINATION OF UNIT WEIGHT TEST	
a) Using the Tamping Rod	
Mass of the aggregate + the measure, G kg	7.496
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
b) Without Using the Tamping Rod	
Mass of the aggregate + the measure, G = kg	7.366
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
2. DETERMINATION OF SPECIFIC GRAVITY AND ABSORPTION TEST	
<u>For Fine Aggregate:</u>	
Dry weight of the test sample, A = (g)	475
Saturated surface dry weight of the test sample, B = (g)	500
Weight of the test sample + flask, C = (g)	1005
Weight of flask with water filled to 500 ml mark, D = (g)	705
<u>For Coarse Aggregate:</u>	
Dry weight of the test sample, A = (g)	2380
Saturated surface dry weight of the test sample, in air, B = (g)	2645
Saturated surface dry weight of the test sample, in water, C = (g)	1600
3. SIEVE ANALYSIS	
<u>Data obtained from the sieve analysis of a fine aggregate:</u>	
Sieve	Retained on (g)

3/8"	0
No:4	100
No:8	180
No:16	310
No:30	170
No:50	250
Pan	0
Data obtained from the sieve analysis of a coarse aggregate:	
Sieve	Retained on (g)
2"	0
3/2"	110
3/4"	130
3/8"	770
No:4	390
No:8	100
Pan	0
4. DETERMINATION OF THE AMOUNT OF MATERIAL FINER THAN NO.200 SIEVE TEST	
Original dry mass of sample, B =g	230
Dry mass of sample after washing, C =g	190
5. ALKALI REACTIVITY OF AGGREGATES TEST	
Initial Length = 285 mm	285
Length of the specimen after 5 days =	286.102
Length of the specimen after 9days =	286.198
Length of the specimen after 11 days =	286.233
Length of the specimen after 14 days =	286.345
6. SOUNDNESS TEST	
The sieve size through which the aggregate passes = 4 32 16 2" 30 3/8" 8 50	
After 5 repetitions of the test, loss in weight;	
Treated with magnesium sulfate solution, % =	10
Treated with sodium sulfate solution, % =	14
7. RESISTANCE TO ABRASION TEST	
The weight of the test sample after 100 revolutions =	4800
The weight of the test sample after 500 revolutions =	3950

G7 DATA

1. DETERMINATION OF UNIT WEIGHT TEST	
a) Using the Tamping Rod	
Mass of the aggregate + the measure, G kg	7.539
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
b) Without Using the Tamping Rod	
Mass of the aggregate + the measure, G = kg	7.381
Mass of the measure, T = kg	2.8
Volume of the measure, V = 2.8 lt	2.8
2. DETERMINATION OF SPECIFIC GRAVITY AND ABSORPTION TEST	
<u>For Fine Aggregate:</u>	
Dry weight of the test sample, A = (g)	515
Saturated surface dry weight of the test sample, B = (g)	535
Weight of the test sample + flask, C = (g)	1045
Weight of flask with water filled to 500 ml mark, D = (g)	715
<u>For Coarse Aggregate:</u>	
Dry weight of the test sample, A = (g)	2640
Saturated surface dry weight of the test sample, in air, B = (g)	2970
Saturated surface dry weight of the test sample, in water, C = (g)	1918
3. SIEVE ANALYSIS	
<u>Data obtained from the sieve analysis of a fine aggregate:</u>	
Sieve	Retained on (g)
3/8"	0
No:4	90
No:8	190
No:16	290
No:30	180
No:50	210
Pan	0
<u>Data obtained from the sieve analysis of a coarse aggregate:</u>	
Sieve	Retained on (g)
2"	0
3/2"	70
3/4"	140
3/8"	730
No:4	350
No:8	60
Pan	0
4. DETERMINATION OF THE AMOUNT OF MATERIAL FINER THAN NO.200 SIEVE TEST	
Original dry mass of sample, B =g	270

Dry mass of sample after washing, C =g	230
5. ALKALI REACTIVITY OF AGGREGATES TEST	
Initial Length = 285 mm	285
Length of the specimen after 5 days =	285.766
Length of the specimen after 9days =	286.036
Length of the specimen after 11 days =	286.157
Length of the specimen after 14 days =	286.257
6. SOUNDNESS TEST	
The sieve size through which the aggregate passes = 4 32 16 2" 30 3/8" 8 50	
After 5 repetitions of the test, loss in weight;	
Treated with magnesium sulfate solution, % =	6
Treated with sodium sulfate solution, % =	16
7. RESISTANCE TO ABRASION TEST	
The weight of the test sample after 100 revolutions =	4350
The weight of the test sample after 500 revolutions =	3750