



MILITARY ENGINEER SERVICES (MES)



MATERIAL TESTING LABORATORY

Mobile: 01769-012888, <http://mes.org.bd>

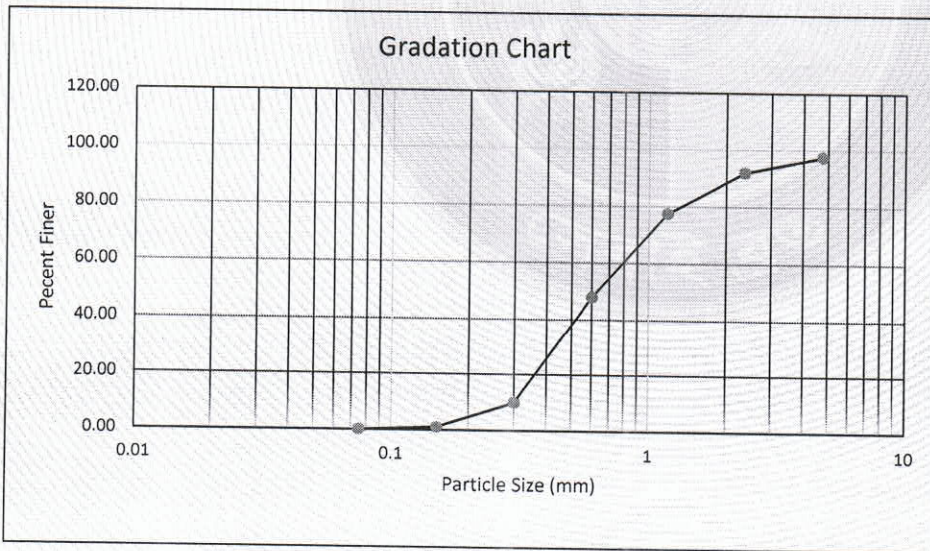
TEST RESULT FOR FINENESS MODULUS (F.M.) OF SAND

Sieve Analysis and Grain Size Distribution of Sand (ASTM C136)

Job No : 364(D)/2025-2026 (Sand).
 Reference: : CEN/82 of 2025-2026/16/E-6 Dt.14 May'2026.
 Sample send by : AGE (Navy) Kaptai.
 Project : Construction of 1 x Multipurpose Dril Shed.
 Sample : Sylhet Sand.
 Date of Sample collection : 19 May'2026
 Date of Test : 20 May'2026

TEST RESULTS

Sieve Size	Material Retained	Percentage of Material Retained	Cumulative % Retained	Percent Finer	Fineness Modulus
mm	gm	%	%	%	
4.750	9.65	2.41	2.41	97.59	FM = 2.66
2.360	22.31	5.58	7.99	92.01	
1.180	58.27	14.57	22.56	77.44	
0.600	117.85	29.46	52.02	47.98	
0.300	131.01	32.75	84.77	10.00	
0.150	46.45	11.61	96.39	1.00	
0.075	11.64	2.91	..	0.00	
#Pan	2.56	0.64	...	0.00	
Total	399.74	99.94	Σ= 266.14		



Report Prepared by :

MD IKBAL HOSSEN

SAE B/R
AHQ E in C's Br
Wks Dte, Dhaka Cantt.

Test Performed by :

ANASAN HABIB

AE B/R
Actg SO-III (Lab)
AHQ E in C's Br
Wks Dte, Dhaka Cantt.

Countersigned by :

MD ATIKUR RAHMAN
MAJOR
OIC (Lab)
AHQ E in C's Br
Wks Dte, Dhaka Cantt.

Permissible Value:

1. For Sylhet/Domar sand minimum FM will be = 2.50
2. For Local sand minimum FM will be = 1.5
3. For Vitty sand minimum FM will be = 0.80





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TEST RESULT FOR FINENESS MODULUS (F.M.) OF SAND

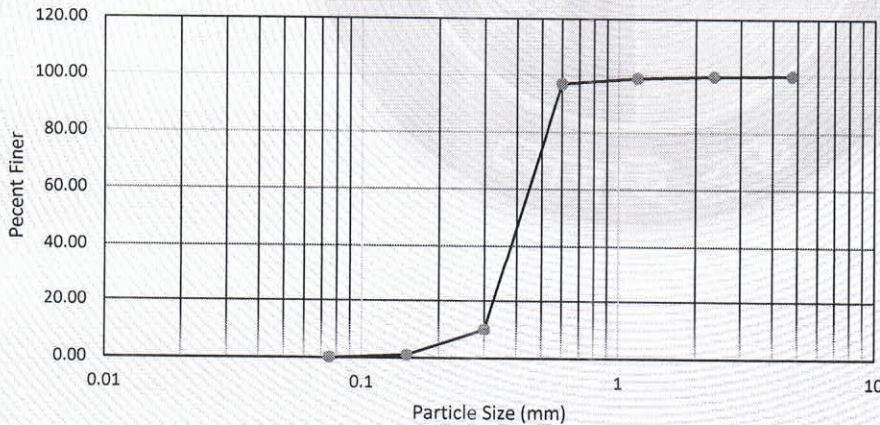
Sieve Analysis and Grain Size Distribution of Sand (ASTM C136)

Job No : 364(D)/2025-2026 (Sand).
Reference: : CEN/82 of 2025-2026/16/E-6 Dt.14 May'2026.
Sample send by : AGE (Navy) Kaptai.
Project : Construction of 1 x Multipurpose Dril Shed.
Sample : Local Sand.
Date of Sample collection : 19 May'2026
Date of Test : 20 May'2026

TEST RESULTS

Sieve Size	Material Retained	Percentage of Material Retained	Cumulative % Retained	Percent Finer	Fineness Modulus
mm	gm	%	%	%	
4.750	0	0.00	0.00	100.00	FM = 1.55
2.360	1.06	0.27	0.27	99.74	
1.180	2.8	0.70	0.97	99.04	
0.600	8.25	2.06	3.03	96.97	
0.300	212.06	53.02	56.04	10.00	
0.150	155.91	38.98	95.02	1.00	
0.075	17.27	4.32	..	0.00	
#Pan	2.58	0.65	...	0.00	
Total	399.93	99.98	$\Sigma = 155.32$		

Gradation Chart



Report Prepared by :

MD IKBAL HOSEN

SAE B/R
AHQ E in C 's Br
Wks Dte, Dhaka Cantt.

Test Performed by :

AHASAN HABIB

AE B/R
Actg SO-III (Lab)
AHQ E in C 's Br
Wks Dte, Dhaka Cantt.

Countersigned by :

MD ATIKUR RAHMAN

MAJOR
OIC (Lab)
AHQ E in C 's Br
Wks Dte, Dhaka Cantt.

Permissible Value:

1. For Sylhet/Domar sand minimum FM will be = 2.50
2. For Local sand minimum FM will be = 1.5
3. For Vitty sand minimum FM will be = 0.80





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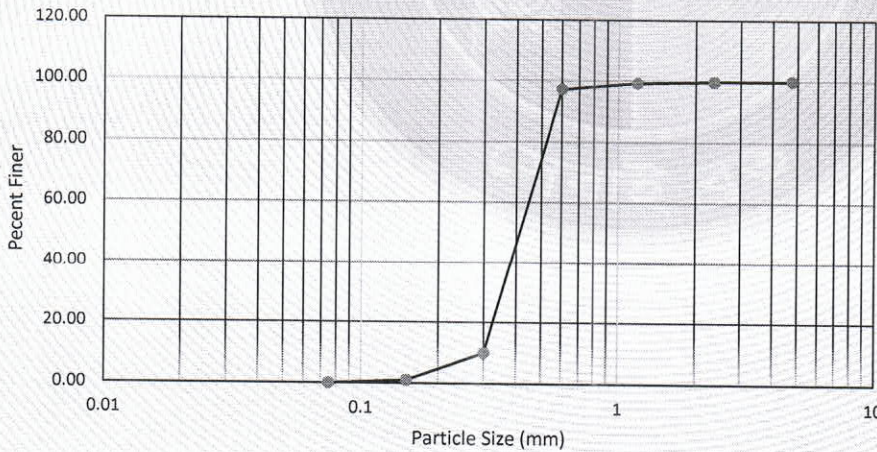
Sieve Analysis and Grain Size Distribution of Sand (ASTM C136)

Job No : 364(D)/2025-2026 (Sand).
Reference: : CEN/82 of 2025-2026/16/E-6 Dt.14 May'2026.
Sample send by : AGE (Navy) Kaptai.
Project : Construction of 1 x Multipurpose Drill Shed.
Sample : Local Sand-1.2 (As per letter).
Date of Sample collection : 19 May'2026
Date of Test : 20 May'2026

TEST RESULTS

Sieve Size	Material Retained	Percentage of Material Retained	Cumulative % Retained	Percent Finer	Fineness Modulus
mm	gm	%	%	%	
4.750	0	0.00	0.00	100.00	FM = 1.56
2.360	1.18	0.30	0.30	99.71	
1.180	1.8	0.45	0.75	99.26	
0.600	8.16	2.04	2.79	97.22	
0.300	217.21	54.30	57.09	10.00	
0.150	152.91	38.23	95.32	1.00	
0.075	15.96	3.99	..	0.00	
#Pan	2.34	0.59	...	0.00	
Total	399.56	99.89	$\Sigma = 156.23$		

Gradation Chart



Report Prepared by :

MD IKBAL HOSSEN
SAE B/R
AHQ E in C's Br
Wks Dte, Dhaka Cantt.

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AHASAN HABIB
AE B/R
Actg SO-III (Lab)
AHQ E in C's Br
Wks Dte, Dhaka Cantt.

Countersigned by :

MD ATIKUR RAHMAN
MAJOR
OIC (Lab)
AHQ E in C's Br
Wks Dte, Dhaka Cantt.

Permissible Value:

1. For Sylhet/Domar sand minimum FM will be = 2.50
2. For Local sand minimum FM will be = ~~2.5~~ 1.20
3. For Vitty sand minimum FM will be = 0.80

