



24 ENGR CONSTR BDE  
TESTING LABORATORY  
BANGLADESH ARMY

24 ENGR CONSTR BDE TESTING LABORATORY  
ZIA COLONY, DHAKA CANTONMENT, DHAKA-1206

Revision no.:01

Effective from: Apr 2025

Doc. no.: 24  
ECBTL/QF031

Issue no.: 03

Review date: Mar 2028

Page no.: 01 of 01

24ECBTL no : 26/PIRP/Stone Chips/BOC&TL/3115/Test  
Customer's ref : 609/Project/21/Pabna-Ichamoti Nodi  
Customer's name & add. : Bay Oceania C&T Ltd  
Name of project : Pabna-Ishamoti River Project  
Name of sub contractor : NA  
Sample description : Stone (Moddhopara)  
Location /source : Moddhopara  
Tested by : Md. Nurul Amin Mirza

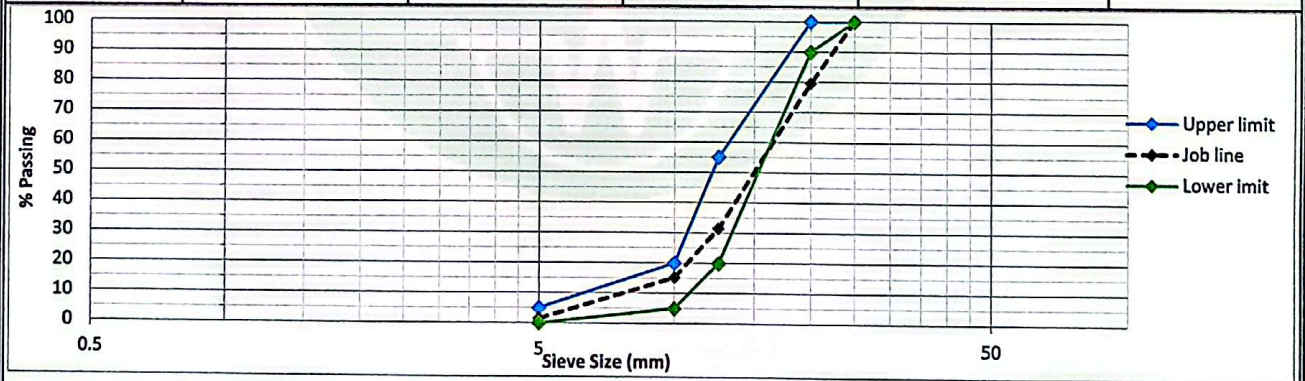
Specimen condition : Unsealed  
Specimen no : NA  
Product code : NA  
Sample dimension : NA  
Relative humidity : NA  
Temperature : NA  
Date of sample receive : 01-03-2026  
Date of test : 10-03-2026

TEST REPORT

SIEVE ANALYSIS (Method-AASHTO T27)

Weight of total dry sample 20995.0 gm

Sieve size (mm)	Weight retained (gm)	Cumulative weight retained (gm)	Cumulative Percent retained (%)	Percent passing (%)	Specification limit
25.0	0.0	0.0	0.0	100.0	100
20.0	4288.0	4288.0	20.4	79.6	90~100
12.5	10114.0	14402.0	68.6	31.4	20~55
10.0	3407.0	17809.0	84.8	15.2	5~20
5.00	2886.0	20695.0	98.6	1.4	0~5
Pan	298.0	20993.0	--	--	
Total	20993.0				



Remarks: Grading appears to be coarser. Sample size needs to be adjusted as per specification limit

*[Signature]*  
11/03/26

Tested by

Lab Technician  
HQ 24 Engr Constr Bde

*[Signature]*  
11/03/2026

Checked by

Asstt Tech Manager  
HQ 24 Engr Constr Bde

*[Signature]*  
12/03/26

Quality manager

Quality Manager  
HQ 24 Engr Constr Bde

\* The testing result/report is issued by 24 ECBTL. This result/report refers only the particular item submitted to test.

--- END ---



24 ENGR CONSTR BDE  
TESTING LABORATORY  
BANGLADESH ARMY

24 ENGR CONSTR BDE TESTING LABORATORY  
ZIA COLONY, DHAKA CANTONMENT, DHAKA-1206

Revision no.: 01. Effective from: Apr 2025 Doc. no.: 24  
ECBTL/QF103  
Issue no.: 03 Review date: Mar 2028 Page no.: 01 of 01

24 ECBTL no	: 26/PIRP/Stone Chips/BOC&TL/3115/Test	Specimen condition	: Unsealed
Customer's ref no	: 609/Project/21/Pabna-Ichamoti Nodi	Specimen no	: NA
Customer's name & add	: Bay Oceania C&T Ltd	Product code	: NA
Name of project	: Pabna-Ishamoti River Project	Sample dimension	: NA
Name of sub contractor	: NA	Relative humidity	: NA
Sample description	: Stone (Moddhopara)	Temperature	: NA
Location/source	: Moddhopara	Date of sample receive	: 01-03-2026
Tested by	: Md. Nurul Amin Mirza	Date of test	: 11-03-2026

### TEST REPORT

#### AGGREGATE CRUSHING VALUE (ACV) (Method-BS: 812-110)

Test no.		1	--
Total weight of sample (A)	gm	2785.0	--
Weight of sample passing 2.36 mm (no.8) sieve (B)	gm	614.5	--
Aggregate crushing value (ACV) (B/A)x 100	%	22.1	--
Average	%	22.1	
Test result	Specified limit (STP 7.7.1)	Remarks	
22%	< 30%	....	

*[Signature]*  
11/03/26

Tested by  
Lab Technician  
HQ 24 Engr Constr Bde

*[Signature]*  
11/03/2026

Checked by  
Asstt Tech Manager  
HQ 24 Engr Constr Bde

*[Signature]*  
11/03/26

Quality manager  
Quality Manager  
HQ 24 Engr Constr Bde

\* The testing result/report is issued by 24 ENGR CONSTR BDE. This result/report refers only the particular item submitted to test.

END



24 ENGR CONSTR BDE  
TESTING LABORATORY  
BANGLADESH ARMY

24 ENGR CONSTR BDE TESTING LABORATORY  
ZIA COLONY, DHAKA CANTONMENT, DHAKA-1206

Revision no.: 01.

Effective from: Apr 2025

Doc. no.: 24  
ECBTL/QF103

Issue no.: 03

Review date: Mar 2028

Page no.: 01 of 01

24 ECBTL no : 26/PIRP/Stone Chips/BOC&TL/3115/Test  
Customer's ref. no : 609/Project/21/Pabna-Ichamoti Nodi  
Customer's name & add : Bay Oceania C&T Ltd  
Name of project : Pabna-Ishamoti River Project  
Name of subcontractor : NA  
Sample description : Stone (Moddhopara)  
Location/ source : Moddhopara  
Tested by : Md. Sabuj Ali

Specimen condition : Unsealed  
Specimen no : NA  
Product code : NA  
Sample dimension : NA  
Relative humidity : NA  
Temperature : NA  
Date of sample receive : 01-03-2026  
Date of test : 10-03-2026

### TEST REPORT

#### FLAKINESS INDEX (Method-BS: 812-105.1)

Sieves size (mm)	Weight of total mass (gm)	Weight Passing mass (gm)	(%) Flaky	Remarks
63.0 - 50.0	...	...	...	
50.0 - 37.5	...	...	..	
37.5 - 28.0	...	...	...	
28.0 - 20.0	3000.0	843	28.1	
20.0 - 14.0	2000.0	532	26.6	
14.0 - 10.0	1000.0	268	26.8	
10.0 - 6.3	500.0	199	39.8	
Total	6500.0	1842	28.3	

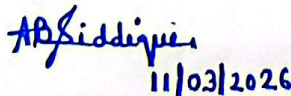
$$\text{Flakiness Index} = \frac{\text{Total weight passing thickness gauge} \times 100}{\text{Total weight of test sample}} = \frac{2082 \times 100}{6500} = 28.3$$

Test result	Specified limit (STP 7.3.1)	Remarks
28	< 30%	....

  
10/03/26

Tested by

Lab Technician  
HQ 24 Engr Constr Bde

  
11/03/2026

Checked by

Asstt Tech Manager  
HQ 24 Engr Constr Bde



Quality manager

Quality Manager  
HQ 24 Engr Constr Bde

\* The testing result/report is issued by 24 ECBTL. This result/report refers only the particular item submitted to test.

--- END ---



24 ENGR CONSTR BDE  
TESTING LABORATORY  
BANGLADESH ARMY

24 ECBTL no. : 26/PIRP/Stone Chips/BOC&TL/3115/Test  
Customer's ref. no : 609/Project/21/Pabna-Ichamoti Nodi  
Customer's name & add : Bay Oceania C&T Ltd  
Name of project : Pabna-Ishamoti River Project  
Name of sub contractor : NA  
Aggregate Des/Type : Stone (Moddhopara)  
Location/Source : Moddhopara  
Tested by : Md. Sabuj Ali

24 ENGR CONSTR BDE TESTING LABORATORY

ZIA COLONY, DHAKA CANTONMENT, DHAKA-1206

Revision no.: 01. Effective from: Apr 2025 Doc. no.: 24 ECBTL/QF051  
Issue no.: 03 Review date: Mar 2028 Page no.: 01 of 01

Specimen condition : Unsealed  
Specimen no : NA  
Product code : NA  
Sample dimension : NA  
Relative humidity : NA  
Temperature : NA  
Date of sample receive : 01-03-2026  
Date of test : 11-03-2026

TEST REPORT

ABRASION TEST OF AGGREGATE BY LOS ANGELES (METHOD-AASHTO T96)

Specimen no	Grading Designation	No. of charges	No. of Revolutions	Weight before test (gm)	Weight in grams after test		Loss in weight (gm)	Percent wear	Average value (%)
					Retained no. 12 sieve	Passing through no. 12 sieve			
1	B	11	500	5000	3708.0	1286.3	4994.3	5.7	25.8

Test result

25.8 %

Specified limit

<30 %

Remarks

\*\*\*

*Signature*  
11/03/26

Tested by:  
Lab Technician  
HQ 24 Engr Constr Bde

*Signature*  
11/03/2026

Checked by:  
Asstt Tech Manager  
HQ 24 Engr Constr Bde

*Signature*  
12/03/26

Quality manager  
Quality Manager  
HQ 24 Engr Constr Bde

\* The testing result/report is issued by 24 ECBTL. This result/report refers only the particular item submitted to test.

--- END ---



24 ENGR CONSTR BDE  
TESTING LABORATORY  
BANGLADESH ARMY

24 ENGR CONSTR BDE TESTING LABORATORY  
ZIA COLONY, DHAKA CANTONMENT, DHAKA-1206

Revision no.:01.

Effective from: Apr 2025

Doc. no.: 24  
ECBTL/QF031

Issue no.: 03

Review date: Mar 2028

Page no.:01 of 01

24 ECBTL no. : 26/PIRP/Panchagarh Sand/BOC&TL/3115/Test  
Customer's ref.no : 609/Project/21/Pabna-Ichamoti Nodi  
Customer's name & add : Bay Oceania C&T Ltd  
Name of project : Pabna-Ishamoti River Project  
Name of subcontractor : NA  
Sample description : Panchagarh Sand  
Location/source : Site  
Tested by : Md. Sabuj Ali  
Specimen condition : Unsealed  
Specimen no : NA  
Product code : NA  
Sample dimension : NA  
Relative humidity : NA  
Temperature : NA  
Date of sample received : 01-03-2026  
Date of test : 04-03-2026

### TEST REPORT

#### FINENESS MODULUS (Method-AASHTO T27)

Weight of total dry sample 428.5

Sieve size (mm)	Weight retained (gm)	Cumulative weight retained (gm)	Cumulative Percent retained (%)	Percent passing (%)	Specification limit
10.0	4.7	4.7	1.1	98.9	--
4.75	5.9	10.6	2.5	97.5	--
2.36	24.4	35.0	8.2	91.8	--
1.18	80.7	115.7	27.0	73.0	--
0.600	111.4	227.1	53.0	47.0	--
0.300	138.7	365.8	85.4	14.6	--
0.150	51.6	417.4	97.4	2.6	--
Pan	10.9	428.3	274.5	--	--
Total	428.3	--	--	--	--

Test result	Specified limit	Remarks
FM= 2.75	FM = > 2.5	****

*[Signature]*  
10/03/26

Tested by

Lab Technician  
HQ 24 Engr Constr Bde

*[Signature]*  
10/03/2026

Checked by

Asstt Tech Manager  
HQ 24 Engr Constr Bde

*[Signature]*  
12/03/26

Quality manager

Quality Manager  
HQ 24 Engr Constr Bde

\* The testing result/report is issued by 24 ECBTL. This result/report refers only the particular item submitted to test.

--- END ---



24 ENGR CONSTR BDE  
TESTING LABORATORY  
BANGLADESH ARMY

24 ENGR CONSTR BDE TESTING LABORATORY  
ZIA COLONY, DHAKA CANTONMENT, DHAKA-1206

Revision no.:01, Effective from: Apr 2025, Doc. no.: 24 ECBTL/QF111  
Issue no.: 03, Review date: Mar 2028, Page no.:01 of 01

24 ECBTL no : 26/PIRP/Panchagarh Sand/BOC&TL/3115/Test  
Customer's ref. no : 609/Project/21/Pabna-Ichamoti Nodi  
Customer's name & add : Bay Oceania C&T Ltd  
Name of project : Pabna-Ishamoti River Project  
Name of subcontractor : NA  
Sample description : Panchagarh Sand  
Location / source : Site  
Tested by : Md. Nurul Amin Mirza  
Specimen condition : Unsealed  
Specimen no : NA  
Product code : NA  
Sample dimension : NA  
Relative humidity : NA  
Temperature : NA  
Date of sample receive : 01-03-2026  
Date of test : 10-03-2026

### TEST REPORT

#### CLAY LUMPS AND FRIABLE PARTICLES (Method-AASHTO T112)

Sieve size		Original grading. (%)	Test fraction mass. (gm)	After test sieve (mm)	Retained mass. (gm)	Passing mass. (gm)	Percent clay etc.	Weighted percent clay etc.	
Passing (mm)	Retained (mm)								
4.75	1.18	100	250	0.850	249.5	0.5	0.20	0.20	
Total		100							0.20
Tested result			Specified limit (STP 3.4)			Remarks			
0.20%			<0.50%			---			

11/03/26

Tested by

Lab Technician  
HQ 24 Engr Constr Bde

11/03/2026

Checked by

Asstt Tech Manager  
HQ 24 Engr Constr Bde

12/03/26

Quality manager

Quality Manager  
HQ 24 Engr Constr Bde

\* The testing result/report is issued by 24 ECBTL. This result/report refers only the particular item submitted to test.

— END —