



DEPARTMENT OF CIVIL ENGINEERING

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CONCRETE LABORATORY



BRTC No. : **1103-80854/CE/25-26; Dt. 17/5/2026** Sheet 1 of 2

Sent by : Md. Abu Talha, Assistant Engineer E/M, Acting AGE, (Airforce) PKP
Ba Bi Ba Ghati Bir Uttam Sultan Mahmud, Noluta Bazar, Shokhipur, Tangail

Ref. No. : EinC/14 of 2025-2026/02/E-3; Dt. 10/2/2026

Project : Quality Test of Cement (Contract No. EENC/14 of 2025-2026)

Sample : **Cement** [Brand: ELEPHANT; ID:] Type: CEM I 52.5 N

Date of Casting : 7/6/2026 Our ID : **MB-29** Manufacturing Date: May/June/2026

Test Method & Specification : ASTM

Test Results of Portland Cement (Type-I)

Compressive Strength, psi & (MPa): ASTM C109/ C109M-21	Age	3 days	7 days	28 days
	Date	10-Jun-26	14-Jun-26	5-Jul-26
	In figure	3640 psi (25.1 MPa)	4430 psi (30.5 MPa)	6110 psi (42.2 MPa)
	In words	Three thousand six hundred forty psi	Four thousand four hundred thirty psi	Six thousand one hundred ten psi
Standard/Optional* Requirements for PC Type I : ASTM C150 - 22		1740 psi (12 MPa)	2760 psi (19 MPa)	4060 psi (28 MPa)
Mixing water temperature		23	Curing water temperature	20.5 - 25°C

Water for Normal Consistency: ASTM C187-16		Initial Setting Time (minutes): ASTM C191-21		Final Setting Time (minutes): ASTM C191-21	
Standard Requirements: ASTM C150-22	Test Result	Standard Requirements: ASTM C150-22	Test Result	Standard Requirements: ASTM C150-22	Test Result
****	23%	Not less than 45 minutes	118	Not more than 375 minutes	318

Fineness (Specific Surface), m ² /kg : ASTM C204-18		Soundness: ASTM 1038-19		Density/ Specific Gravity (gm/cc): ASTM C188-17		Weight of Cement Bag (kg)	
Standard Requirements: ASTM C150-22	Test Result	Standard Requirements	Test Result	Standard Requirements	Test Result	Standard Requirements	Test Result
Minimum 260 m ² /kg	414	****	****	****	3.15	****	****

Note: Sample was received in standard bag.

Countersigned by:

Prof. Dr. Bashir Ahmed

Test-In-Charge, Dept. of Civil Engineering, BUET



Test performed by:

6/7/26

Dr. Mahbuba Begum

Professor, Dept. of Civil Engineering, BUET

Important Notes: Samples as supplied to us have been tested in our laboratory. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that samples are sent in a secured and sealed cover/packet/container duly signed by a competent authority. In order to avoid fraudulent fabrication of test results, it is also recommended that all the test reports are collected by an authorized person, and not by the Contractor/Supplier.

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CONCRETE LABORATORY



BRTC No. : **1103-80854/CE/25-26; Dt. 17/5/2026** Sheet 2 of 2
Sent by : Md. Abu Talha, Assistant Engineer E/M, Acting AGE, (Airforce) PKP
Ba Bi Ba Ghati Bir Uttam Sultan Mahmud, Noluta Bazar, Shokhipur, Tangail
Ref. No. : EinC/14 of 2025-2026/02/E-3; Dt. 10/2/2026
Project : Quality Test of Cement (Contract No. EENC/14 of 2025-2026)
Sample : **Cement** [Brand: ELEPHANT; ID:] Type: CEM II/A-M (S-V-L) 42.5N
Date of Casting : 7/6/2026 **Our ID : MB-30** Manufacturing Date: May/June/2026
Test Method & Specification : ASTM

Test Results of Blended Hydraulic (Portland Composite) Cement

Compressive Strength, psi & (MPa): ASTM C109/ C109M-21	Age	3 days	7 days	28 days
	Date	10-Jun-26	14-Jun-26	5-Jul-26
	In figure	3620 psi (25 MPa)	4670 psi (32.2 MPa)	5700 psi (39.3 MPa)
	In words	Three thousand six hundred twenty psi	Four thousand six hundred seventy psi	Five thousand seven hundred psi
Standard Requirements for All Types of IP/IS/IL/IT : ASTM C595-21		1890 psi (13 MPa)	2900 psi (20 MPa)	3620 psi (25 MPa)
Mixing water temperature		23	Curing water temperature	20.5 - 25°C

Water for Normal Consistency: ASTM C187-16		Initial Setting Time (minutes): ASTM C191-21		Final Setting Time (minutes): ASTM C191-21	
Standard Requirements: ASTM C595-21	Test Result	Standard Requirements: ASTM C595-21	Test Result	Standard Requirements: ASTM C595-21	Test Result
****	23.5%	Not less than 45 minutes	135	Not more than 420 minutes	315

Fineness (Specific Surface), m ² /kg : ASTM C204-18		Soundness: ASTM 1038-19		Density/ Specific Gravity (gm/cc): ASTM C188-17		Weight of Cement Bag (kg)	
Standard Requirements: ASTM C595-21	Test Result	Standard Requirements	Test Result	Standard Requirements	Test Result	Standard Requirements	Test Result
****	398	****	****	****	3.11	****	****

Note: Sample was received in standard bag.

Countersigned by:

Prof. Dr. Bashir Ahmed

Test-In-Charge, Dept. of Civil Engineering, BUET



Test performed by:

Dr. Mahbuba Begum

Professor, Dept. of Civil Engineering., BUET

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CONCRETE LABORATORY



BRTC No. : **1103-78422/CE/25-26; Dt. 16/4/2026** Sheet 1 of 2
 Sent by : Md. Shahin Mia, Manager, Grade-1 (BD-1) for Director General (BD-1)
 Mongla Cement Factory, Burirdanga, Mongla Bagerhat.
 Ref. No. : SKS/BUET/BD-1/13/4208; Dt. 16/4/2026
 Project : Testing of Sena Cement.
 Sample : **Cement** [Brand: SENA CEMENT; ID:] Type: CEM I 52.5 N
 Date of Casting : 18/4/2026 **Our ID : 2M-72** Manufacturing Date: March/April-26//
 Test Method & Specification : ASTM

Test Results of Portland Cement (Type-I)

Compressive Strength, psi & (MPa): ASTM C109/ C109M-21	Age	3 days	7 days	28 days
	Date	21-Apr-26	25-Apr-26	16-May-26
	In figure	3810 psi (26.3 MPa)	4850 psi (33.4 MPa)	5910 psi (40.8 MPa)
	In words	Three thousand eight hundred ten psi	Four thousand eight hundred fifty psi	Five thousand nine hundred ten psi
Standard/Optional* Requirements for PC Type I : ASTM C150 - 22		1740 psi (12 MPa)	2760 psi (19 MPa)	4060 psi (28 MPa)
Mixing water temperature		23	Curing water temperature	20.5 - 25°C

Water for Normal Consistency: ASTM C187-16		Initial Setting Time (minutes): ASTM C191-21		Final Setting Time (minutes): ASTM C191-21	
Standard Requirements: ASTM C150-22	Test Result	Standard Requirements: ASTM C150-22	Test Result	Standard Requirements: ASTM C150-22	Test Result
****	23%	Not less than 45 minutes	114	Not more than 375 minutes	304

Fineness (Specific Surface), m ² /kg : ASTM C204-18		Soundness: ASTM 1038-19		Density/ Specific Gravity (gm/cc): ASTM C188-17		Weight of Cement Bag (kg)	
Standard Requirements: ASTM C150-22	Test Result	Standard Requirements	Test Result	Standard Requirements	Test Result	Standard Requirements	Test Result
Minimum 260 m ² /kg	425	****	****	****	3.14	****	****

Note: Sample was received in standard bag.

Countersigned by:

Prof. Dr. Bashir Ahmed

Test-In-Charge, Dept. of Civil Engineering, BUET



Test performed by:

18/05/2026

Dr. Sk. Md. Mashrur

Assistant Professor, Dept. of Civil Engineering, BUET

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BRTC No. : **1103-78422/CE/25-26; Dt. 16/4/2026** Sheet 2 of 2
 Sent by : Md. Shahin Mia, Manager, Grade-1 (BD-1) for Director General (BD-1)
 Mongla Cement Factory, Burirdanga, Mongla Bagerhat.
 Ref. No. : SKS/BUET/BD-1/13/4208; Dt. 16/4/2026
 Project : Testing of Sena Cement.
 Sample : **Cement** [Brand: SENA CEMENT POWER; ID:] Type: CEM II/A-M (S-V-L) 42.5N
 Date of Casting : 18/4/2026 **Our ID : 2M-73** Manufacturing Date: March/April-26//
 Test Method & Specification : ASTM

Test Results of Blended Hydraulic (Portland Composite) Cement

Compressive Strength, psi & (MPa): ASTM C109/ C109M-21	Age	3 days	7 days	28 days
	Date	21-Apr-26	25-Apr-26	16-May-26
	In figure	3760 psi (25.9 MPa)	4790 psi (33 MPa)	5950 psi (41.1 MPa)
	In words	Three thousand seven hundred sixty psi	Four thousand seven hundred ninety psi	Five thousand nine hundred fifty psi
Standard Requirements for All Types of IP/IS/IL/IT : ASTM C595-21		1890 psi (13 MPa)	2900 psi (20 MPa)	3620 psi (25 MPa)
Mixing water temperature		23	Curing water temperature	20.5 - 25°C

Water for Normal Consistency: ASTM C187-16		Initial Setting Time (minutes): ASTM C191-21		Final Setting Time (minutes): ASTM C191-21	
Standard Requirements: ASTM C595-21	Test Result	Standard Requirements: ASTM C595-21	Test Result	Standard Requirements: ASTM C595-21	Test Result
****	23%	Not less than 45 minutes	129	Not more than 420 minutes	337

Fineness (Specific Surface), m ² /kg : ASTM C204-18		Soundness: ASTM 1038-19		Density/ Specific Gravity (gm/cc): ASTM C188-17		Weight of Cement Bag (kg)	
Standard Requirements: ASTM C595-21	Test Result	Standard Requirements	Test Result	Standard Requirements	Test Result	Standard Requirements	Test Result
****	457	****	****	****	3.12	****	****

Note: Sample was received in standard bag.

Countersigned by:

Prof. Dr. Bashir Ahmed

Test-In-Charge, Dept. of Civil Engineering, BUET



Test performed by

18.05.26

Dr. Sk. Md. Mashrur

Assistant Professor, Dept. of Civil Engineering, BUET

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