BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)



DEPARTMENT OF CIVIL ENGINEERING

Mobile: 01819 557 964; PABX: 966 5650-80 Ext. 7226; www.buet.ac.bd/ce/



CONCRETE LABORATORY

BRTC No.

110212874/19-20/CE; Dt. 13/7/2020

Sheet 1 of 2

Sent by

S M Hasanuzzaman Azad, Major, GE Army Sylhet

Ref. No.

CEA/345 of 2019-2020/02/E-3; Dt. 11/6/2020

Our ID:

Project

Project of GE (Army) Sylhet

Sample

Cement

[Brand:ELEPHANT; ID: --] Type: CEM I 52.5 N

Date of Casting

18/7/2020

SA-118

Test Method & Specification: ASTM

Test Results of Portland Cement (Type-I)

	Age	3 days 7 days		28 days	
Compression	Date 21-Jul-20 25-Jul-20		25-Jul-20	15-Aug-20	
Compressive — Strength,	N. ¢.	3680 psi	5010 psi	6060 psi	
psi & (Mpa):	In figure	(25.4 Mpa) (34.5 Mpa)		(41.8 Mpa)	
ASTM 109-11b	In words	Three thousand six hundred eighty psi	Five thousand ten psi	Six thousand sixty ps	
Standard/Optional* Requirements for PC Type I: ASTM C150-12		1740 psi	2760 psi	4060 psi	
		(12 Mpa)	(19 Mpa)	(28 Mpa)	
Mixing water temperature		23 °C	Curing water temperature	20.5 - 25°C	

Water for Normal Consistency: ASTM C187-11		Initial Setting Time (minutes): ASTM C191-08		Final Setting Time (minutes): ASTM C191-08		
Standard Requirements: ASTM C150-12	Test Result	Standard Requirements. ASTM C150-12	Test Result	Standard Requirements: ASTM C150-12	Test Result	
***	23.5%	Not less than 45 minutes	125	Not more than 375 minutes	240	

Fineness (Specific Surface), m ² /kg : ASTM C204-11 (Air Permeability Method)		Density/ Specific Gravity (gm/cc): ASTM C188-09		Weight of Cement Bag (kg)	
Standard Requirements: ASTM C150-12	Test result	Standard Requirements	Test Result	Standard Requirements	Test Result
Minimum 280 m^2/ kg	334	***	****	****	***

Note: Sample was received in not properly sealed condition.

Countersigned by:

Dr. Md. Abdul Jalil

Professor, Dept. of Civil Engg., BUET

Test performed by:

A16/8/44

Snigdha Afsana

Assistant Professor, Dept. of Civil Engg, BUET

Important Notes: Samples as supplied to us ha

4SJgB5nXP oratory. BRTC does not have any responsibility as to the representative

character of the samples required to be tested. It i ples 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.

110212874/19-20/CE:

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Sheet 2 of 2

Sent by

S M Hasanuzzaman Azad, Major, GE Army Sylhet

Our ID:

CEA/345 of 2019-2020/02/E-3; Dt. 11/6/2020

Ref. No. Project

Project of GE (Army) Sylhet

Sample

Cement

[Brand :ELEPHANT; ID: --] Type: CEM II/B-M (S-V-L) 42.5N

Date of Casting

18/7/2020

SA-119

Test Method & Specification: ASTM

Test Results of Blended Hydraulic (Portland Composite) Cement

Compressive Strength, psi & (Mpa): ASTM 109-11b	Age	Age 3 days 7 days Date 21-Jul-20 25-Jul-20		28 days	
	Date			15-Aug-20	
	No Flavora	2250 psi	3140 psi	4490 psi	
	In figure	(15.5 Mpa) (21.6 Mpa)		(31 Mpa)	
	In words	Two thousand two hundred fifty psi			
	Requirements for All T: ASTM C595-12	1890 psi (13 Mpa)	2900 psi (20 Mpa)	3620 psi (25 Mpa)	
Mixing water temperature		23 °C	Curing water temperature	20.5 - 25°C	

Water for Normal Consistency: ASTM C187-11		Initial Setting Time (minutes); ASTM C191-08		Final Setting Time (minutes): ASTM C191-08		
Standard Requirements: ASTM C595-12	Test Result	Standard Requirements: ASTM C595-12	Test Result	Standard Requirements: ASTM C595-12	Test Result	
***	23%	Not less than 45 minutes	165	Not more than 420 minutes	400	

Fineness (Specific Surface), m²/kg : ASTM C204-11 (Air Permeability Method)		Density/ Specific Gravity (gm/cc): ASTM C188-09		Weight of Cement Bag (kg)	
Standard Requirements: ASTM C595-12	Test result	Standard Requirements	Test Result	Standard Requirements	Test Result
****	356	****	****	****	****

Note: Sample was received in not properly sealed condition.

Countersigned by:

Dr. Md. Abdul Jalil

Professor, Dept. of Civil Engg., BUET

4bhmD2X7e

Test performed by:

Snigdha Afsana

Assistant Professor, Dept. of Civil Engg., BUET

Important Notes: Samples as supplied to us character of the samples required to be tested laboratory. BRTC does not have any responsibility as to the representative 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.