

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)



DEPARTMENT OF CIVIL ENGINEERING

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http://brtc.ce.buet.ac.bd/#/home

CONCRETE LABORATORY



BRTC No. : **1102-30546/20-21/CE; Dt. 28/2/2021**
 Sent by : Muhammad Sakib Mahmud Ansary, Executive Engineer E/M,
 GE (Biman), Tejgaon
 Ref. No. : ৩০০২/ইইনসি/০৪/ই-৩; Dt. 20/10/2020
 Project : Test of cement manufactured by Sena Kalyan Sangstha for construction of GE (Air)
 Tejgaon
 Sample : **Cement** [Brand: ELEPHANT; ID: --] Type: CEM II/B-M (S-V-L) 42.5N
 Date of Casting : 15/3/2021 Our ID : M-122 Manufacturing Date: Not mentioned
 Test Method & Specification : ASTM

Test Results of Blended Hydraulic (Portland Composite) Cement

Compressive Strength, psi & (Mpa): ASTM 109-11b	Age	3 days	7 days	28 days
	Date	18-Mar-21	22-Mar-21	12-Apr-21
	In figure	2040 psi (14.1 Mpa)	2950 psi (20.3 Mpa)	4640 psi (32 Mpa)
In words	Two thousand forty psi	Two thousand nine hundred fifty psi	Four thousand six hundred forty psi	
Maximum of Standard Requirements for All Types of IP/IS/IL/IT : ASTM	1890 psi (13 Mpa)	2900 psi (20 Mpa)	3620 psi (25 Mpa)	
Mixing water temperature	22.5 °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 C595-19	Test Result	Standard Requirements: ASTM C595-19	Test Result	Standard Requirements: ASTM C595-19	Test Result
****	24%	Not less than 45 minutes	179	Not more than 420 minutes	459

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 C595-19	Test result	Standard Requirements	Test Result	Standard Requirements	Test Result
19	451	****	****	****	****

Note: Sample was received in sealed condition.

Countersigned by:

Dr. A. B. M. Badruzzaman
 Professor, Dept. of Civil Engg., BUET



NWbRetthN

Test performed by:

12-04-2021

Dr. Sheikh Mokhlesur Rahman
 Assistant Professor, Dept. of Civil Engg., BUET



Important Notes: Samples as supplied to us ha 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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