

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)



DEPARTMENT OF CIVIL ENGINEERING
 Mobile: 01819557964; PABX: 55167100 Ext. 7226
 http://brtc.ce.buet.ac.bd/#/home
CONCRETE LABORATORY



BRTC No. : **1102-52594/21-22/CE; Dt. 25/1/2022** Sheet 1 of 1
 Sent by : Abu Ahmed Zahid. DGM, Quality Assurance & Lab, M.I. Cement Factory Limited, West Mukterpur, Munshigonj
 West Mukterpur, Munshigonj
 Ref. No. : -; Dt. 25/1/2022
 Project : Portland Composite Cement Test: BDS EN 197-1, CEM II/AM(S-V-L) 42.5N
 Sample : **Cement** [Brand: Crown Cement; ID: PCC Week-04, January 2022] Type: CEM II/A-M (S-V-L) 42.5N
 Date of Casting : 29/1/2022 Our ID : RA-18 Manufacturing Date: Jan-Feb 2022
 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 | 1-Feb-22 | 5-Feb-22 | 26-Feb-22 |
| | In figure | 3030 psi (20.9 Mpa) | 3970 psi (27.4 Mpa) | 5900 psi (40.7 Mpa) |
| | In words | Three thousand thirty psi | Three thousand nine hundred seventy psi | Five thousand nine hundred psi |
| Maximum of Standard Requirements for All Types of IP/IS/IL/IT : ASTM C595-19 | | 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 |
| **** | 25% | Not less than 45 minutes | 148 | Not more than 420 minutes | 340 |

| Fineness (Specific Surface), m ² /kg : | | 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 |
| **** | **** | **** | **** | **** | **** |

Note: Sample was received in standard bag.

Countersigned by:

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



Test performed by:

26-02-2022

Dr. Raquib Ahsan
 Professor, Dept. of Civil Engg., 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.

28



E7C2QfeSJ