



## DEPARTMENT OF CIVIL ENGINEERING

Mobile 01819557964; PABX: 55666000-2 Ext: 7226  
http://brtctest.ce.buet.ac.bd, https://verify.ce.buet.ac.bd



## TRANSPORTATION ENGINEERING LABORATORY

**BRTC No. : 1103-58548 /25-26/CE ; Dt: 10/8/2025**

**Sent by :** Kazi Jamaluddin Ahmed, Project Director, Union Mercantile Ltd. House No. 16, Road No. 10/A, Block- H, Banani, Dhaka-1213.

**Ref. No. :** UML/BUET/250810- ; Dt: 10/8/2025

**Project :** Improvement of Fish Landing Center of Bangladesh Fisheries Development Corporation in Cox's Bazar District.

**Sample :** Stone Chips **Sample ID:** Stone Chips (Maddhapara Granite Mining Co. Ltd, Maddhapara, Parbatipur, Dinajpur)

**Test :** Specific Gravity and Water Absorption (ASTM C127)

**Date of Test :** 18/8/2025

### TEST REPORT

Sample Designation	Weight of oven dry sample (gm)	Weight of SSD sample (gm)	Weight of saturated sample in water (gm)	Bulk Specific Gravity (OD) (Relative Density)	Absorption Capacity (%)
Stone Chips	3659.9	3670.7	2333.4	2.74	0.30

Notes: Samples were received in sealed condition.

**Countersigned by:**

**Prof. Dr. Moazzem Hossain**  
Test-In-Charge  
Department of Civil Engineering  
BUET, Dhaka-1000, Bangladesh

**Test Performed by:**



19 August 2025

**Dr. M. Neaz Murshed**  
Associate Professor  
Department of Civil Engineering  
BUET, Dhaka-1000, Bangladesh

**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 secure and sealed cover/packet/container under signature of the competent authority. In order to avoid fraudulent fabrication of test results, it is recommended that all test reports are collected by duly authorized person, and not by the Contractor/Supplier.



# BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)



## DEPARTMENT OF CIVIL ENGINEERING

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## CONCRETE LABORATORY



BRTC No. : 1103-58548/25-26/CE; Dt: 10/8/2025 Page 1 of 1  
Client : Kazi Jamaluddin Ahmed, Project Director, Union Mercantile Ltd.  
Client Address : House No: 16, Road No: 10/A, Block-H, Banani, Dhaka.  
Ref. No. : UML/BUET/250810-01; Dt: 10/8/2025  
Project : The Project for the Improvement of Fish Landing Center of Bangladesh Fisheries Development Corporation in Cox's Bazar District.  
Sample : Armour & Rubble stone Cylindrical Core  
Year of Construction : Not Mentioned  
Sample Collected by : Client Date of Sample Collection: Not Mentioned  
Test : Compressive Strength of Armour & Rubble Stone Cylindrical Core [ASTM C 42/C 42M]  
Date of Test : 26/8/2025

### TEST REPORT

Sl. No.	Location	Sample Identification Mark	Length of Sample	Diameter of Sample	Average Cross Sectional Area	Ultimate Load	Crushing Strength	Type of Failure
			in.	in.	sq. in.	lb.		
1	Armor Stone and Rubble Core Cut	1	7.2	3.66	10.52	178,899	17000 psi (117.2 MPa)	----
-	-	-	-	-	-	---	-	----

#### Notes:

- Samples were received in sealed condition.
- The diameter of core specimens for the determination of compressive strength in load bearing structural members shall be at least 3.70 in. [94 mm]. For non-load bearing structural members or when it is impossible to obtain cores with length-diameter ratio (L/D) greater than or equal to 1, core diameters less than 3.70 in. [94 mm] are not prohibited.
- The compressive strengths of nominal 2-in. [50-mm] diameter cores are known to be somewhat lower and more variable than those of nominal 4-in. [100-mm] diameter cores. In addition, smaller diameter cores appear to be more sensitive to the effect of the length-diameter ratio.

**COMMENT** — Please compare the results with your corresponding design values and consult with your design engineer.

Countersigned by :

Prof. Dr. Moazzem Hossain  
Test-In-Charge  
Department of Civil Engineering  
BUET, Dhaka-1000, Bangladesh

Test Performed by :

27/08/2025  
Dr. Mohammad Al Amin Siddique  
Professor  
Department of Civil Engineering  
BUET, Dhaka-1000, Bangladesh

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## CONCRETE LABORATORY



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Project : The Project for the Improvement of Fish Landing Center of Bangladesh Fisheries Development Corporation in Cox's Bazar District.  
Sample : Armour & Rubble stone Cylindrical Core  
Year of Construction : Not Mentioned  
Sample Collected by : Client Date of Sample Collection: Not Mentioned  
Test : Compressive Strength of Armour & Rubble Stone Cylindrical Core [ASTM C 42/C 42M]  
Date of Test : 20/8/2025

### TEST REPORT

Sl. No.	Location	Sample Identification Mark	Length of Sample	Diameter of Sample	Average Cross Sectional Area	Ultimate Load	Crushing Strength	Type of Failure
			in.	in.	sq. in.	lb.		
1	Armor Stone and Rubble Core Cut	2	6.9	3.66	10.52	200,291	19040 psi (131.3 MPa)	----
2	Armor Stone and Rubble Core Cut	3	6.9	3.66	10.52	196,184	18650 psi (128.6 MPa)	----

#### Notes:

- Samples were received in sealed condition.
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**COMMENT** — Please compare the results with your corresponding design values and consult with your design engineer.

Countersigned by:

Prof. Dr. Moazzem Hossain  
Test-In-Charge  
Department of Civil Engineering  
BUET, Dhaka-1000, Bangladesh

Test Performed by

23/08/2025  
Dr. Mohammad Al Amin Siddique  
Professor  
Department of Civil Engineering  
BUET, Dhaka-1000, Bangladesh

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