

DEPARTMENT OF CIVIL ENGINEERING

Mobile: 01819557964; PABX: 55167100 Ext. 7226 http://brtc.ce.buet.ac.bd/#/home



CONCRETE LABORATORY

BRTC No. : 1102-78099 /22-23/CE; Dt: 11/12/2022

Sent by : Manager, Engineering, CDC Concrete Ltd.

Ref. No. : CDCCL/DIB 80 mm; Dt: 11/12/2022

Project : CDC Concrete Ltd., 29/1, Goranchatbari, Mirpur, Dhaka 1216, Bangladesh.

Sample : **Uni-Paver** [Size: (200 x 163 X 80) mm] [Color: Red]

Test : Compressive Strength [BS 6717-1]

Date of Test : 17/12/2022 - 18/12/2022

TEST REPORT

SI. No.	Specimen Designation/ Frog Mark	Specimen Height	Specimen Area	Maximum Load	Crushing Strength	Corrected Crushing Strength*	Average Compressive Strength
		(mm)	(sq. mm)	(kN)	(N/mm^2)	(N/mm^2)	
1	CDC	80.00	27790	897	32.30	38.00	
2	CDC	80.00	27790	1198	43.10	51.00	_
3	CDC	80.00	27790	938	33.70	40.00	

* Thickness and Chamfer Correction Factor: 1.18

Note: 1. Samples were received in unsealed condition.

Only three samples are tested.

Test Performed by:

816m. 19112122

Mohammad Irfan Hossain

Assistant Professor Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

Dr. A. B. M. Badruzzaman
Professor
Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

Countersigned by:

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BRTC No. : 1103-14403 /23-24/CE; Dt: 15/2/2024

: Shao Jie, Project Director, TBEA Co., Ltd. No. 189, Beijing South Road, Changji, Xinjiang, China Sent by

: TBEA-T-E2-HB-003; Dt: 12/2/2024 Ref. No.

: Expansion and Strengthening of Power System Network under DPDC Area, 1-E-2 Twin Tower Project

[Nominal Size: 390 mmX190 mmX140 mm] : C.C. Hollow Block Sample

: Compressive Strength of Concrete Masonry Unit [ASTM C140-03] Test Casting Date: 8/1/2024

Date of Test : 3/3/2024

[Mix Proportion (as quoted): Not mentioned]

TEST REPORT

SI. No.	Specimen Designation/ Frogmark	Sample Gross Area	Sample Net Area	Maximum Load	Crushing Strength	Average Crushing Strength	Mode of Failure	Specimen Top View
		(sq. in)	(sq. in)	(lb)	(psi)			
1	E2-08012024- 1/1	84.63	45.57	155,512	3,413	3350 psi	Combined *	
2	E2-08012024- 1/2	84.20	45.60	153,715	3,371	(23 MPa)	Combined *	
3	E2-08012024- 1/3	84.20	45.60	148,323	3,253	(236 kg/cm^2)	Combined *	

* Combined = Mortar and Aggregate failure.

Notes: 1. Samples were received in sealed condition.

2. Crushing strength is calculated based on net cross sectional area.

Countersigned by:

Prof. Dr. Hasib Mohammed Ahsan

Test-In-Charge

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh Test Performed by:

Mahbubah Ahmed

Lecturer

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

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CONCRETE LABORATORY

BRTC No. : 1103-46203 /24-25/CE; Dt: 5/3/2025

Sent by : Shao Jie, Project Director, TBEA Co., Ltd.

Ref. No. : TBEA-T-A6-HB-003; Dt: 19/2/2025

Project : Expansion and Strengthening of Power System Network under DPDC Area Sample : C.C. Hollow Block [Nominal Size: 390 mmX190 mmX 190 mm]

Test : Compressive Strength of Concrete Masonry Unit [ASTM C140-03]

Date of Test: 6/3/2025

TEST REPORT

SI. No.	Specimen Designation/ Frogmark	Sample Gross Area	Sample Net Area	Maximum Load	Crushing Strength	Average Crushing Strength	Mode of Failure	Specimen Top View
		(sq. in)	(sq. in)	(lb)	(psi)			
1	A6-15012025-1/1	114.85	58.67	151,183	2,577	2530 psi	Combined *	
2	A6-15012025-1/2	114.85	58.66	146,866	2,503	(17.5 MPa)	Combined *	
3	A6-15012025-1/3	114.85	58.66	146,866	2,504	(178 kg/cm^2)	Combined *	

* Combined = Mortar and Aggregate failure.

Notes: 1. Samples were received in sealed condition.

2. Crushing strength is calculated based on net cross sectional area.

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Countersigned by:

Prof. Dr. Moazzem Hossain

Test-In-Charge
Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

Test Performed by:

Sadab Ishraq Khan

Lecturer

Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

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DEPARTMENT OF CIVIL ENGINEERING

Mobile: 01819557964; PABX: 55167100 Ext. 7226 http://brtc.ce.buet.ac.bd/#/home Bureau of Research, Testing & Consultation

CONCRETE LABORATORY

BRTC No. : 1103-14403 /23-24/CE; Dt: 15/2/2024

Sent by : Shao Jie, Project Director, TBEA Co., Ltd. No. 189, Beijing South Road, Changji, Xinjiang, China

Ref. No. : TBEA-T-E2-HB-004; Dt: 12/2/2024

Project : Expansion and Strengthening of Power System Network under DPDC Area, 1-E-2 Twin Tower

Sample : C.C. Hollow Block [Nominal Size: 390 mmX190 mm]

Test : Compressive Strength of Concrete Masonry Unit [ASTM C140-03]

Casting Date: 8/1/2024 [Mix Proportion (as quoted): Not mentioned]

Date of Test : 3/3/2024

TEST REPORT

SI. No.	Specimen Designation/ Frogmark	Sample Gross Area	Sample Net Area	Maximum Load	Crushing Strength	Average Crushing Strength	Mode of Failure	Specimen Top View
		(sq. in)	(sq. in)	(lb)	(psi)			
1	E2-08012024- 1/1	114.85	56.42	143,830	2,549	2780 psi	Combined *	
2	E2-08012024- 1/2	114.85	55.21	160,455	2,906	(19 MPa)	Combined *	
3	E2-08012024- 1/3	114.85	55.21	160,005	2,898	(195 kg/cm^2)	Combined *	

* Combined = Mortar and Aggregate failure.

Notes: 1. Samples were received in sealed condition.

2. Crushing strength is calculated based on net cross sectional area.

Test Performed by:

Mahbubah Ahmed

Lecturer

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

Countersigned by:

Prof. Dr. Hasib Mohammed Ahsan

Test-In-Charge

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

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DEPARTMENT OF CIVIL ENGINEERING

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Testing & Consultation

CONCRETE LABORATORY

BRTC No.

: 1103-43974 /24-25/CE; Dt: 10/2/2025

Sent by

: Engr. Sakib Ahmed, Manager, Engineering, CDC Concrete Ltd.

Ref. No.

: CDCCL/Rectangular Paver; Dt: 6/2/2025

Project

: CDC Concrete Ltd.

Sample

: Solid Block

[Size: 200 mm x100 mm x80 mm]

Test

: Compressive Strength of Concrete Masonry Unit [ASTM C140-03]

Date of Test

: 16/2/2025

TEST REPORT

SI. No.	Specimen Designation/ Frog Mark	Length of Test Sample	Width of Test Sample	Surface Area of Sample	Maximum Load	Crushing Strength	Average Crushing Strength	Mode of Failure
		(inch)	(inch)	(Sq. Inch)	(lb)	(psi)		
1		7.87	3.94	31.00	251,128	8,101		Combined *
2	<u>-</u>	7.87	3.94	31.00	300,327	9,688	 -	Combined *
3		7.87	3.94	31.00	263,592	8,503		Combined *

* Combined = Mortar and Aggregate failure.

Notes: 1. Samples were received in sealed condition.

2. Only three samples are sent for test.

Test Performed by:

Prof. Dr. Moazzem Hossain

Test-In-Charge

Countersigned by:

Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

17/2/25

Sadab Ishraq Khan

Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

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DEPARTMENT OF CIVIL ENGINEERING

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CONCRETE LABORATORY

BRTC No. : 1103-05798 /23-24/CE; Dt: 14/11/2023

Sent by : Manager, Engineering, CDC Concrete Ltd.

Ref. No. : CDCCL/Concrete Solid Brick; Dt: 14/11/2023

Project : CDC Concrete Ltd, Goranchatbari, Mirpur, Dhaka.

Sample : Solid Block [Size: 240x107x70 mm]

Test : Compressive Strength of Concrete Masonry Unit [ASTM C140-03]

Date of Test : 15/11/2023

TEST REPORT

SI. No.	Specimen Designation/ Frog Mark	Length of Test Sample	Width of Test Sample	Surface Area of Sample	Maximum Load	Crushing Strength	Average Crushing Strength	Mode <i>of</i> Failure
		(inch)	(inch)	(Sq. Inch)	(lb)	(psi)		
1	- 4	9,45	4.13	39.06	231,385	5,924	5890 psi	Combined *
2	-	9.45	4.13	39.06	244,221	6,252	(40.5 MPa)	Combined *
3	-	9.45	4.13	39.06	214,344	5,488	(414 kg/cm^2)	Combined *

* Combined = Mortar and Aggregate failure.

Note: 1. Samples were received in unsealed condition.



Countersigned by:

Test Performed by:

Prof. Dr. Hasib Mohammed Ahsan

Test-In-Charge

Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

Mohammad Irfan Hossain
Assistant Professor
Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

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CONCRETE LABORATORY

BRTC No.

: 1103-41200 /24-25/CE; Dt: 12/1/2025

Sent by

: Mohammad Hossen Mia, Superintendent Engineer, Civil Engineering, Projects, GILDAN.

Ref. No.

: SDS/Road/SINAMM-20250109-1; Dt: 9/1/2025

Project

: SDS International Limited (Road)

Sample

: Uni-Paver

[Size: (225x110x83)mm]

[Color: Grey]

Test

: Compressive Strength [BS 6717-1]

Date of Test : 14/1/2025 - 15/1/2025

TEST REPORT

SI. No.	Specimen Designation/ Frog Mark	Specimen Height	Specimen Area	Maximum Load	Crushing Strength	Corrected Crushing Strength*	Average Compressive Strength
		(mm)	(sq. mm)	(kN)	(N/mm^2)	(N/mm^2)	
1	CDC	83	24800	1062	42.80	51.00	
2	CDC	82	24800	994	40.10	47.00	48 N/mm^2
3	CDC	83	24800	963	38.80	46.00	

*Thickness and Chamfer Correction Factor: 1.18

Notes: 1. Samples were received in sealed condition.

2. Only three samples are sent for test.

Countersigned by:

Prof. Dr. Hasib Mohammmed Ahsan

Test-In-Charge

Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

Tazwar Bakhtiyar Zahid

Assistant Professor

Test Performed by:

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

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CONCRETE LABORATORY

BRTC No.

: 1103-41200 /24-25/CE; Dt: 12/1/2025

Sent by

: Mohammad Hossen Mia, Superintendent Engineer, Civil Engineering, Projects, GILDAN.

Ref. No.

: SDS/Road/SINAMM-20250109-2; Dt: 9/1/2025

Project

: SDS International Limited (Road)

Sample

: Uni-Paver

[Size: (225x110x85)mm]

[Color: Red]

Test

: Compressive Strength [BS 6717-1]

Date of Test : 14/1/2025 - 15/1/2025

TEST REPORT

SI. No.	Specimen Designation/ Frog Mark	Specimen Height	Specimen Area	Maximum Load	Crushing Strength	Corrected Crushing Strength*	Average Compressive Strength
		(mm)	(sq. mm)	(kN)	(N/mm^2)	(N/mm^2)	
1	CDC	85	24800	1036	41.80	49.00	
2	CDC	85	24800	961	38.80	46.00	48 N/mm^2
3	CDC	85	24800	1040	41.90	49.00	

*Thickness and Chamfer Correction Factor: 1.18

Notes: 1. Samples were received in sealed condition.

2. Only three samples are sent for test.

Countersigned by:

Prof. Dr. Hasib Mohammmed Ahsan

Test-In-Charge

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

Tazwar Bakhtiyar Zahid Assistant Professor

Test Performed by:

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

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DEPARTMENT OF CIVIL ENGINEERING

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CONCRETE LABORATORY

BRTC No.

: 1103-04554 /23-24/CE; Dt: 1/11/2023

Sent by

: Manager, Engineering, CDC Concrete Ltd.

Ref. No.

: CDCCL/Unipaver 80 mm Grey; Dt: 1/11/2023

Project

: CDC Concrete Ltd.

Sample

: Uni-Paver

[Size: (222 x 110 X 80)mm]

[Color: Grey]

Test

: Compressive Strength [BS 6717-1]

Date of Test : 4/11/2023 - 8/11/2023

TEST REPORT

SI. No.	Specimen Designation/ Frog Mark	Specimen Height	Specimen Area	Maximum Load	Crushing Strength	Corrected Crushing Strength*	Average Compressive Strength
		(mm)	(sq. mm)	(kN)	(N/mm^2)	(N/mm^2)	
1	CDC	80.00	24800	1048	42.30	50.00	
2	CDC	80.00	24800	1114	44.90	53.00	52 N/mm^2
3	CDC	80.00	24800	1101	44.40	52.00	

* Thickness and Chamfer Correction Factor: 1.18

Note: 1. Samples were received in unsealed condition.

Countersigned by:

Prof. Dr. Hasib Mohammed Ahsan

Test-In-Charge

Department of Civil Engineering

BUET, Dhaka-1000, Bangladesh

Test Performed by:

Mohammad Irfan Hossain

Assistant Professor Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

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DEPARTMENT OF CIVIL ENGINEERING

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CONCRETE LABORATORY

BRTC No. : 1102-74686 /22-23/CE; Dt: 1/11/2022

Sent by : Manager, Engineering, CDC Concrete Ltd.

Ref. No. : CDCCL/Uniblock 100 Grey; Dt: 1/11/2022

Project : CDC Concrete Ltd, 29/1, Goranchatbari, Mirpur, Dhaka 1216, Bangladesh.

Sample : Uni-Paver [Size: (222 x 110 X 95)mm] [Color: Grey]

Test : Compressive Strength [BS 6717-1]

Date of Test : 13/11/2022 - 14/11/2022

TEST REPORT

SI. No.	Specimen Designation/ Frog Mark	Specimen Height	Specimen Area	Maximum Load	Crushing Strength	Corrected Crushing Strength*	Average Compressive Strength
		(mm)	(sq. mm)	(kN)	(N/mm^2)	(N/mm^2)	
1	CDC	95.00	24800	815	32.90	41.00	
2	CDC	95.00	24800	802	32.40	40.00	48 N/mm^2
3	CDC	95.00	24800	801	32.30	40.00	

* Thickness and Chamfer Correction Factor: 1.24

Note: 1. Samples were received in unsealed condition.

2. Only three samples are tested.

Countersigned by:

Test Performed by:

8110m 19/11/22

Mohammad Irfan Hossain Assistant Professor partment of Civil Engineering

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

Professor Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

Dr. A. B. M. Badruzzaman

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DEPARTMENT OF CIVIL ENGINEERING

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Testing & Consultation

CONCRETE LABORATORY

BRTC No.

1103-12816 /23-24/CE; Dt: 30/1/2024

Sent by

Engr. Sakib Ahmed, Manager, QC, CDC Concrete Ltd., 29/1, Goranchatbari, Mirpur, Dhaka-1216

Ref. No.

: CDCCL/HB 90; Dt: 30/1/2024

Project

: CDC Concrete Ltd.

Sample

: C.C. Hollow Block

[Nominal Size: 390 mmX 190 mmX90 mm]

Test

: Compressive Strength of Concrete Masonry Unit [ASTM C140-03]

Date of Test : 5/2/2024

TEST REPORT

SI. No.	Specimen Designation/ Frogmark	Sample Gross Area	Sample Net Area	Maximum Load	Crushing Strength	Average Crushing Strength	Mode of Failure	Specimen Top View
		(sq. in)	(sq. in)	(lb)	(psi)			
1	-	54.40	37.80	148,772	3,935		Combined *	
2	-	54.40	35.85	112,377	3,135		Combined *	Ō
3		54.40	35.85	120,015	3,348		Combined *	LOJ

* Combined = Mortar and Aggregate failure.

Note: 1. Samples were received in unsealed condition.

2. Crushing strength is calculated based on net cross sectional area.

Countersigned by:

Prof. Dr. Hasib Mohammed Ahsan

Test-In-Charge

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh Test Performed by:

Mahbubah Ahmed

Lecturer

Department of Civil Engineering BUET, Dhaka-1000, Bangladesh

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