



FDC MATERIALS TESTING CENTER INC.

DPWH - BIES Accredited Laboratory
Email: fcdmaterials@gmail.com and fcdmaterials_qc@yahoo.com
Address: 81 D Malakas Street, Barangay Pinyahan, Quezon City
Tel. No.: (02) 9999-1321 / 09259077045 / 09170617719



Page: 1 of 1
Issued Date: April 26, 2024
b. Report No.: FDC-24-Y-7570

TEST REPORT ON MECHANICAL PROPERTY OF PLASTIC MATERIALS

RETROFITTING/STRENGTHENING OF PERMANENT BRIDGES, MALIKO
BRIDGE (B02103MN) ALONG COTABATO-MALABANG-LANAO DEL
NORTE ROAD, LANAO DEL SUR

Project : NORTE ROAD, LANAO DEL SUR
Contract I.D. No. : 24K00120
Location : Lanao Del Sur
Contractor : KOUZBARY CORPORATION
Sample Description : Epoxy
Original Source : Cyanclay Inc.
Governing spec's : Item 416(2)
Sampled by : Mohammy M. Macabando / Abubacar A. Mamadra April 25, 2024
M.E. II, DPWH-X M.E. II, Kouzbary Corp.
Submitted by : Mohammy M. Macabando / Abubacar A. Mamadra April 26, 2024
(Name & designation) M.E. II, Kouzbary Corp.
Tested by : H. Flores - Lab. Technician FDC-QC April 26, 2024
(Name & designation) Office

TESTS	DATE TESTED	METHOD USED	REQUIREMENTS	RESULTS
TENSILE STRENGTH				
1.) Thickness, mm	04/26/2024	ASTM D-638	-	4.20
2.) Width, mm	04/26/2024	ASTM D-638	-	10.00
3.) Tensile Strength, MPa	04/26/2024	ASTM D-638	30 min.	56.29
COMPRESSIVE STRENGTH				
1.) Diameter, mm	04/26/2024	ASTM D-695	-	10.03
2.) Compressive Strength, MPa	04/26/2024	ASTM D-695	50 min.	90.80

***** Nothing Follows *****

REMARKS: The above sample MEETS SPECIFICATIONS.

This report gives the results carried out on samples submitted and tested to FDC Materials Testing Center Inc.

This Laboratory Responsible for test only.

Prepared by:

Donald A. Remacido
Sr. Laboratory Technician

Checked by:

Edgar John C. Aradillos
Laboratory Head

Attested by:

MARY V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID 0091221

Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

ABUBACAR A. MAMADRA
M.E. II, Kouzbary Corp.



FDC MATERIALS TESTING CENTER INC.

DPWH – BRS Accredited Laboratory

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Address: 81 D Malakas Street, Barangay Pinyahan, Quezon City

Tel. No.: (02) 8939-1521 / 09225087562 / 09178617719



Date: : April 26, 2024
Lab. Report No. : FDC-24-U-7570
Sheet No. : 1 of 1

REPORT ON TENSILE STRENGTH OF CARBON FIBER

Project : RETROFITTING/STRENGTHENING OF PERMANENT BRIDGES, MALIKO BRIDGE (B02103MN) ALONG COTABATO-MALABANG-LANAO DEL NORTE ROAD, LANAO DEL SUR

Contract I.D. No. : 24K00120

Location : Lanao Del Sur

Contractor : KOUZBARY CORPORATION

Kind of Mtrl's. : Carbon Fiber, Plate

Sample I.D. : 120LDS24-CFP-1

Sampled at : Jobsite

Original Source : Cyanclay Inc.

Proposed Use : Item 416(1)b - Carbon Fiber, Plate

Spec's Item No. : ASTM D-3039

Sampled By : Mohammy M. Macabando /
M.E. II, DPWH-X
Abubacar A. Mamadra
M.E. II, Kouzbary Corp.
April 25, 2024
Date

Submitted By : Mohammy M. Macabando /
M.E. II, DPWH-X
Abubacar A. Mamadra
M.E. II, Kouzbary Corp.
April 25, 2024
Date

TESTED BY : H. Flores
FDC-MTCI
April 26, 2024
Date
(Name & designation) (Office)

SAMPLE MARKINGS	Thickness (mm)	Width (mm)	Area (mm ²)	Maximum Load (Kn)	Tensile Strength (psi)	Tensile Strength (Mpa)
Sample 1	1.200	12.70	15.24	38.63	367,533	2535
Sample 2	1.200	12.64	15.17	39.79	380,329	2623
Sample 3	1.200	12.68	15.22	39.85	379,767	2619
x x x x Nothing Follows x x x x						

Remarks: The above Test report MEETS THE STANDARDS SPECIFICATION.
Brake on the top of Carbon Fiber handle. / Brake on Grip of Carbon Fiber.
FDC Material Testing Center Inc. - QC is a responsible for test only.

PREPARED BY:

Donald A. Renacido
Sr. Laboratory Technician

Test Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

CHECKED BY:

Edgar John C. Aragonillos
Laboratory Head

ABUBACAR A. MAMADRA
M.E. II, Kouzbary Corp.

ATTESTED BY:

MARIY V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID 0091221



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Date: April 26, 2024
Lab. Report No.: FDC-24-X-7570
Sheet No.: 1 of 1

REPORT ON TENSILE STRENGTH OF CARBON FIBER

Project : RETROFITTING/STRENGTHENING OF PERMANENT BRIDGES, MALIKO BRIDGE (B02103MN) ALONG COTABATO-MALABANG-LANAO DEL NORTE ROAD, LANAO DEL SUR

Contract I.D. No. : 24K00120

Location : Lanao Del Sur

Contractor : KOUZBARY CORPORATION

Kind of Mtrl's. : Carbon Fiber Sheet 2 Layer

Sample I.D. : 120LDS24-CFSL-1

Sampled at : Jobsite

Original Source : Cyanclay Inc.

Proposed Use : Item 416(1)b - Carbon Fiber Sheet 2 Layer

Spec's Item No. : ASTM D-3039

Sampled By : Mohammy M. Macabando /
M.E. II, DPWH-X
Abubacar A. Mamadra
M.E. II, Kouzbary Corp.

Submitted By : Mohammy M. Macabando /
M.E. II, DPWH-X
Abubacar A. Mamadra
M.E. II, Kouzbary Corp.

TESTED BY : H. Flores
(Name & designation)
FDC-MTCI
(Office)

April 25, 2024
Date
April 25, 2024
Date
April 26, 2024
Date

SAMPLE MARKINGS	Thickness (mm)	Width (mm)	Area (mm ²)	Maximum Load (Kn)	Tensile Strength (psi)	Tensile Strength (Mpa)
Sample 1	0.167	13.53	2.26	9.58	614,451	4238
Sample 2	0.167	13.53	2.26	9.49	609,286	4202
Sample 3	0.167	13.52	2.26	9.52	611,490	4217
x x x x Nothing Follows x x x x						

Remarks: The above Test report MEETS THE STANDARDS SPECIFICATION.
Brake on the top of Carbon Fiber handle. / Brake on Grip of Carbon Fiber.
FDC Materials Testing Center Inc. - QC is a responsible for test only.

PREPARED BY:

Donald M. Benacido
Sr. Laboratory Technician

Test Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

CHECKED BY:

Edgar John C. Aradillos
Laboratory Head

ABUBACAR A. MAMADRA
M.E. II, Kouzbary Corp.

ATTESTED BY:

MARY V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID 0091221



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Date: September 13, 2024
Lab. Report No.: FDC-24-B-7571
Sheet No.: 1 of 1

REPORT ON TENSILE STRENGTH OF CARBON FIBER

Project: RETROFITTING/STRENGTHENING OF PERMANENT BRIDGE MATLING BR.
(B02097MN) ALONG COTABATO-MALABANG-LANAO DEL NORTE RD, LANAO
DEL SUR

Contract I.D. No.: 24K00397
Location: Lanao Del Sur
Contractor: M.M.A. ACHIEVER CONST. & DEVELOPMENT CORPORATION
Kind of Mtrl's.: Carbon Fiber Plate
Sample I.D.: 397LDS24-CFP-1
Sampled at: Jobsite
Original Source: Cyanclay Inc.
Proposed Use: Item 416(1)b - Carbon Fiber Plate
Spec's Item No.: ASTM D-3039

Sampled By: Mohammy M. Macabando /
M.E. II, DPWH-X

Misael H. Ampuan September 12, 2024
M.E. I, MMAACDC Date

Submitted By: Mohammy M. Macabando /
M.E. II, DPWH-X

Misael H. Ampuan September 12, 2024
M.E. I, MMAACDC Date

TESTED BY: H. Flores
(Name & designation)

FDC-MTCI September 13, 2024
(Office) Date

SAMPLE MARKINGS	Thickness (mm)	Width (mm)	Area (mm ²)	Maximum Load (Kn)	Tensile Strength (psi)	Tensile Strength (Mpa)
Sample 1	1.200	12.70	15.24	38.63	367,533	2535
Sample 2	1.200	12.64	15.17	39.79	380,329	2623
Sample 3	1.200	12.68	15.22	39.85	379,767	2619
x x x x Nothing Follows x x x x						

Remarks: The above Test report MEETS THE STANDARDS SPECIFICATION.
Brake on the top of Carbon Fiber handle. / Brake on Grip of Carbon Fiber.
FDC Materials Testing Center Inc. - QC is a responsible for test only.

PREPARED BY:

Donald A. Benacido
Sr. Laboratory Technician

Test Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

CHECKED BY:

Edgar John C. Aradillos
Laboratory Head

MISAEAL H. AMPUAN
M.E. I, MMAACDC

ATTESTED BY:

MARBY V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID 0091221



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Date: September 13, 2024
Lab. Report No.: FDC-24-W-7570
Sheet No.: 1 of 1

REPORT ON TENSILE STRENGTH OF CARBON FIBER

Project : RETROFITTING/STRENGTHENING OF PERMANENT BRIDGE MATLING BR.
(B02097MN) ALONG COTABATO-MALABANG-LANAO DEL NORTE RD, LANAO
DEL SUR

Contract ID, No. : 24K00397

Location : Lanao Del Sur

Contractor : M.M.A. ACHIEVER CONST. & DEVELOPMENT CORPORATION

Kind of Mtrl's. : Carbon Fiber Sheet 2 Layer

Sample ID. : 397LDS24-CFS-1

Sampled at : Jobsite

Original Source : Cyanclay Inc.

Proposed Use : Item 416(1)b - Carbon Fiber Sheet 2 Layer

Spec's Item No. : ASTM D-3039

Sampled By : Mohammy M. Macabando /
M.E. II, DPWH-X Misael H. Ampuan September 12, 2024
M.E. I, MMAACDC Date

Submitted By : Mohammy M. Macabando /
M.E. II, DPWH-X Misael H. Ampuan September 12, 2024
M.E. I, MMAACDC Date

TESTED BY : H. Flores FDC-MTCI September 13, 2024
(Name & designation) (Office) Date

SAMPLE MARKINGS	Thickness (mm)	Width (mm)	Area (mm ²)	Maximum Load (Kn)	Tensile Strength (psi)	Tensile Strength (Mpa)
Sample 1	0.167	13.53	2.26	9.58	614,451	4238
Sample 2	0.167	13.53	2.26	9.49	609,286	4202
Sample 3	0.167	13.52	2.26	9.52	611,490	4217
x x x x Nothing Follows x x x x						

Remarks: The above Test report MEETS THE STANDARDS SPECIFICATION.
Brake on the top of Carbon Fiber handle. / Brake on Grip of Carbon Fiber.
FDC Materials Testing Center Inc. - QC is a responsible for test only.

PREPARED BY:

Donald A. Keracido
Sr. Laboratory Technician

Test Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

CHECKED BY:

Edgar John C. Aradillos
Laboratory Head

MISAEAL H. AMPUAN
M.E. I, MMAACDC

ATTESTED BY:

MARVY V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID 0091221



FDC MATERIALS TESTING CENTER INC.

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Page: 1 of 1

Issued Date: September 13, 2024

b. Report No.: FDC-24-C-7571

TEST REPORT ON MECHANICAL PROPERTY OF PLASTIC MATERIALS

RETROFITTING/STRENGTHENING OF PERMANENT BRIDGE MATLING BR. (B02097MN) ALONG COTABATO-MALABANG-LANAO DEL NORTE

Project : RD, LANAO DEL SUR
Contract I.D. No. : 24K00397
Location : Lanao Del Sur
Contractor : M.M.A. ACHIEVER CONST. & DEVELOPMENT CORPORATION
Sample Description : Epoxy
Original Source: : Cyanclay Inc.
Governing spec's. : Item 416(1)b
Sampled by : Mohammy M. Macabando / Misael H. Ampuan September 12, 2024
M.E. II, DPWH-X M.E. I, MMAACDC
Submitted by : Mohammy M. Macabando / Misael H. Ampuan September 13, 2024
(Name & designation) M.E. I, MMAACDC
Tested by : H. Flores - Lab. Technician FDC-QC September 13, 2024
(Name & designation) Office

TESTS	DATE TESTED	METHOD USED	REQUIREMENTS	RESULTS
TENSILE STRENGTH				
1.) Thickness, mm	09/13/2024	ASTM D-638	-	4.20
2.) Width, mm	09/13/2024	ASTM D-638	-	10.00
3.) Tensile Strength, MPa	09/13/2024	ASTM D-638	30 min.	56.29
COMPRESSIVE STRENGTH				
1.) Diameter, mm	09/13/2024	ASTM D-695	-	10.03
2.) Compressive Strength, MPa	09/13/2024	ASTM D-695	50 min.	90.80

***** Nothing Follows *****

REMARKS: The above sample MEETS SPECIFICATIONS.

This report gives the results carried out on samples submitted and tested to FDC Materials Testing Center Inc.

This Laboratory Responsible for test only.

Prepared by:

Donald J. Benacido
Sr. Laboratory Technician

Checked by:

Edgar John G. Aradillos
Laboratory Head

Attested by:

MARLYN V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID 0091221

Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

MISAEAL H. AMPUAN
M.E. I, MMAACDC



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Tel. No.: (02) 8095 1881 / 092230017508 / 09170617719



Date: March 14, 2025
Lab. Report No.: FDC-25-Z-7570
Sheet No.: 1 of 1

REPORT ON TENSILE STRENGTH OF CARBON FIBER

Project: REHABILITATION/MAJOR REPAIR OF PERMANENT BRIDGES, MAGANDING BRIDGE 2 (B02109MN) ALONG MAHARLIKA HIGHWAY (COTABATO-MALABANG-LANAO DEL NORTE ROAD), LANAO DEL SUR

Contract I.D. No.: 25K00024
Location: Lanao Del Sur
Contractor: M&A POWERS CONSTRUCTION
Kind of Mtrl's.: Carbon Fiber Plate
Sample I.D.: 024LDS25-CFP-1
Sampled at: Jobsite
Original Source: Cyanclay Inc.
Proposed Use: Item 416(1)b - Carbon Fiber Plate
Spec's Item No.: ASTM D-3039
Sampled By: Mohammy M. Macabando /
M.E. II, DPWH-X

Namroden J. Miraato
M.E. II, M&A Powers Const.
March 13, 2025
Date

Submitted By: Mohammy M. Macabando /
M.E. II, DPWH-X

Namroden J. Miraato
M.E. II, M&A Powers Const.
March 13, 2025
Date

TESTED BY: H. Flores
(Name & designation)

FDC-MTCI
(Office)
March 14, 2025
Date

SAMPLE MARKINGS	Thickness (mm)	Width (mm)	Area (mm ²)	Maximum Load (Kn)	Tensile Strength (psi)	Tensile Strength (Mpa)
Sample 1	1.200	12.70	15.24	38.63	367,533	2535
Sample 2	1.200	12.64	15.17	39.79	380,329	2623
Sample 3	1.200	12.68	15.22	39.85	379,767	2619
X X X X Nothing Follows X X X X						

Remarks: The above Test report MEETS THE STANDARDS SPECIFICATION.
Brake on the top of Carbon Fiber handle. / Brake on Grip of Carbon Fiber.
FDC Materials Testing Center Inc. - QC is a responsible for test only.

PREPARED BY:

Donald A. Francisco
Sr. Laboratory Technician

Test Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

CHECKED BY:

Edgar John C. Aradillos
Laboratory Head

NAMRODEN J. MIRAATO
M.E. II, M&A Powers Const.

ATTESTED BY:

MARY V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID 0091221



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Page: 1 of 1
Issued Date: March 14, 2025
b. Report No.: FDC-25-A-7571

TEST REPORT ON MECHANICAL PROPERTY OF PLASTIC MATERIALS

REHABILITATION/MAJOR REPAIR OF PERMANENT BRIDGES,
MAGANDING BRIDGE 2 (B02109MN) ALONG MAHARLIKA HIGHWAY

Project : (COTABATO-MALABANG-LANAO DEL NORTE ROAD), LANAO DEL SUR

Contract I.D. No. : 25K00024

Location : Lanao Del Sur

Contractor : M&A POWERS CONSTRUCTION

Sample Description : Epoxy

Original Source: : Cyanclay Inc.

Governing spec's. : Item 416(1)b

Sampled by : Mohammy M. Macabando /
M.E. II, DPWH-X

Namroden J. Miraato
M.E. II, M&A Powers Const.

March 13, 2025

Submitted by : Mohammy M. Macabando /
(Name & designation)

Namroden J. Miraato
M.E. II, M&A Powers Const.

March 14, 2025

Tested by : H. Flores - Lab. Technician
(Name & designation)

FDC-QC
Office

March 14, 2025

TESTS	DATE TESTED	METHOD USED	REQUIREMENTS	RESULTS
TENSILE STRENGTH				
1.) Thickness, mm	03/14/2025	ASTM D-638	-	4.20
2.) Width, mm	03/14/2025	ASTM D-638	-	10.00
3.) Tensile Strength, MPa	03/14/2025	ASTM D-638	30 min.	56.29
COMPRESSIVE STRENGTH				
1.) Diameter, mm	03/14/2025	ASTM D-695	-	10.03
2.) Compressive Strength, MPa	03/14/2025	ASTM D-695	50 min.	90.80

**** Nothing Follows ****

REMARKS: The above sample MEETS SPECIFICATIONS.

This report gives the results carried out on samples submitted and tested to FDC Materials Testing Center Inc.
This Laboratory Responsible for test only.

Prepared by:

Donald A. Remacido
Sr. Laboratory Technician

Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

Checked by:

Edgar John C. Aradillos
Laboratory Head

NAMRODEN J. MIRAATO
M.E. II, M&A Powers Const.

Attested by:

MARY V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID 0091221



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Tel. No.: (02)9939-1321 / 09225067562 / 09170617719



Date: : March 14, 2025
Lab. Report No. : FDC-25-V-7570
Sheet No. : 1 of 1

REPORT ON TENSILE STRENGTH OF CARBON FIBER

Project : REHABILITATION/MAJOR REPAIR OF PERMANENT BRIDGES, MAGANDING BRIDGE 2 (B02109MN) ALONG MAHARLIKA HIGHWAY (COTABATO-MALABANG-LANAO DEL NORTE ROAD), LANAO DEL SUR

Contract I.D. No. : 25K00024

Location : Lanao Del Sur

Contractor : M&A POWERS CONSTRUCTION

Kind of Mtrl's. : Carbon Fiber Sheet 2 Layer

Sample I.D. : 024LDS25-CFSL-1

Sampled at : Jobsite

Original Source : Cyanclay Inc.

Proposed Use : Item 416(1)b - Carbon Fiber Sheet 2 Layer

Spec's Item No. : ASTM D-3039

Sampled By : Mohammy M. Macabando / M.E. II, DPWH-X Namroden J. Miraato M.E. II, M&A Powers Const. March 13, 2025 Date

Submitted By : Mohammy M. Macabando / M.E. II, DPWH-X Namroden J. Miraato M.E. II, M&A Powers Const. March 13, 2025 Date

TESTED BY : H. Flores FDC-MTCI March 14, 2025 Date
(Name & designation) (Office)

SAMPLE MARKINGS	Thickness (mm)	Width (mm)	Area (mm ²)	Maximum Load (Kn)	Tensile Strength (psi)	Tensile Strength (Mpa)
Sample 1	0.167	13.53	2.26	9.58	614,451	4238
Sample 2	0.167	13.53	2.26	9.49	609,286	4202
Sample 3	0.167	13.52	2.26	9.52	611,490	4217
x x x x Nothing Follows x x x x						

Remarks: The above Test report MEETS THE STANDARDS SPECIFICATION.
Brake on the top of Carbon Fiber handle. / Brake on Grip of Carbon Fiber.
FDC Materials Testing Center Inc. - QC is a responsible for test only.

PREPARED BY:

Donald A. Bonacido
Sr. Laboratory Technician

Test Witnessed by:

MOHAMMY M. CABANDO
M.E. II, DPWH-X

CHECKED BY:

Edgar John C. Aradillos
Laboratory Head

NAMRODEN J. MIRAATO
M.E. II, M&A Powers Const.

ATTESTED BY:

MARLY V. GUICO
Materials Engineer 1-3238
Civil Engineer-PRC ID: 0091221